

**MINISTRY OF HEALTH OF UKRAINE  
KHARKOV NATIONAL MEDICAL UNIVERSITY**

**The control tests  
of the licensing exam "KROK-2"  
section "Pediatric Dentistry"  
for 5-th year students (6 faculty for international  
students) with examples of solutions**

**Student's name**\_\_\_\_\_

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**Course, group**\_\_\_\_\_

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Контрольные тесты для подготовки к лицензионному экзамену "КРОК-2. Стоматология детского возраста" с примерами решения задач (для иностр. студентов V курса 6-го фак-та) / сост. Р. С. Назарян, В. В. Кузина, Ю. Ю. Ярославская и др. – Харьков : ХНМУ, 2018. – 116 с.

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7. Traumatic injuries of the teeth and jaws in children
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### 1. Caries

1. A 3 year old child has a cavity in the 84 tooth. Objectively: there is a carious cavity on the masticatory surface of the tooth within mantle dentin. Dentin is softened, probing of cavity walls is painful, percussion is painless. Make a diagnosis:

- |                                      |                               |
|--------------------------------------|-------------------------------|
| <i>A. Acute median caries</i>        | <i>D. Acute deep caries</i>   |
| <i>B. Chronic superficial caries</i> | <i>E. Chronic deep caries</i> |
| <i>C. Acute superficial caries</i>   |                               |

2. An 8 year old child has a carious cavity on the masticatory surface of the 16 tooth within circumpulpal dentin. Probing of cavity floor is painful, dentin is softened, slightly pigmented. Cold stimulus causes short-term pain. Choose a dental treatment paste:

- |                                     |                     |
|-------------------------------------|---------------------|
| <i>A. Hydroxycalcium-containing</i> | <i>D. Arsenious</i> |
| <i>B. Resorcin-formaline</i>        | <i>E. Thymol</i>    |
| <i>C. Paraformaldehyde</i>          |                     |

3. Preventive examination of an 8 year old boy revealed matted chalky spots on the vestibular surface of the 11 and 21 teeth localized in the precervical area. The child has no subjective complaints. What is the most probable diagnosis?

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| <i>A. Acute initial caries</i>    | <i>D. Acute superficial caries</i> |
| <i>B. Spotty fluorosis</i>        | <i>E. Chronic initial caries</i>   |
| <i>C. Local enamel hypoplasia</i> |                                    |

4. A 16 year old patient complained about discomfort in the area of her upper jaw teeth she has been feeling for 2 weeks. Examination of precervical area of the 11 and 12 teeth revealed whitish matt spots with indistinct outlines that absorb dyes intensively. What treatment of the 11 and 12 teeth should be administered?

- |                                   |                                |
|-----------------------------------|--------------------------------|
| <i>A. Remineralizing therapy</i>  | <i>D. Antiseptic treatment</i> |
| <i>B. Preparation and filling</i> | <i>E. Silver impregnation</i>  |
| <i>C. Spot removal</i>            |                                |

5. A girl is 1,2 year old. Vestibular surface of her 52,51,61,62 teeth has large carious cavities within the enamel. Probing is slightly painful, percussion of the 52, 51, 61, 62 teeth is painless. What treatment is to be administered?

- |   |   |
|---|---|
| <i>A. Silver impregnation</i>                 | <i>D. Coating with fluorine lacquer</i> |
| <i>B. Filling with phosphoric acid cement</i> | <i>E. Amalgam filling</i>               |
| <i>C. Remineralizing therapy</i>              |   |

**6.** A 13 year old child has been suffering from pain in the left inferior molar induced by cold stimuli for several months. Objectively: on the masticatory surface of the 37 tooth there is a carious cavity with overhanging enamel edges filed with circumpulpal dentin. The cavity is filled with light softened dentin. Probing of the cavity floor is somewhat painful. Cold stimuli cause short-term pain. Make a provisional diagnosis:

- |                                    |                                 |
|------------------------------------|---------------------------------|
| <i>A. Acute deep caries</i>        | <i>D. Chronic median caries</i> |
| <i>B. Chronic fibrous pulpitis</i> | <i>E. Chronic deep caries</i>   |
| <i>C. Acute median caries</i>      |                                 |

**7.** Examination of a 9 year old patient revealed a milky spot on the vestibular surface of the 11 tooth close to the cutting edge. Probing and cold stimuli causes no pain reaction. The child was diagnosed with local enamel hypoplasia of the 11 tooth. What treatment should be administered?

- A. A course of remineralizing therapy*
- B. Prophylactic hygiene of oral cavity*
- C. Spot removal*
- D. Hermetization of the affected part*
- E. Cosmetic filling*

**8.** Examination of a 6 year old child revealed a deep carious cavity in the 85 tooth. Percussion and probing are painless. Removal of softened dentin resulted in intercommunication with tooth cavity. Deep probing is painful. X-ray picture of the 85 tooth shows a focus of bony tissue destruction in the area of bifurcation, cortical plate of the 35 tooth has no pathological changes. What paste should be applied for the root filling in this case?

- |                                    |                                    |
|------------------------------------|------------------------------------|
| <i>A. Zink-eugenol paste</i>       | <i>D. Phosphate cement</i>         |
| <i>B. Resorcin-formaline paste</i> | <i>E. Calcium-containing paste</i> |
| <i>C. Glass-ionomer cement</i>     |                                    |

**9.** A 13 year old boy complains about pain in the 46 tooth induced by cold stimuli. Objectively: there is a deep carious cavity on the masticatory surface of the 46 tooth within light softened circumpulpal dentin. Probing of carious cavity floor is overall painful, cold stimulus causes acute pain that is quickly relieved after the stimulus' elimination. Choose an optimal dental treatment paste:

- |                                     |                              |
|-------------------------------------|------------------------------|
| <i>A. Hydroxycalcium-containing</i> | <i>D. Resorcin-formaline</i> |
| <i>B. Thymol</i>                    | <i>E. Zink-eugenol</i>       |
| <i>C. Iodoform</i>                  |                              |

**10.** Examination of an 11 year old girl revealed: caries intensity (sum of carious, filled and extracted teeth) = 3, Green-Vermillion's hygienic index – 1,6, papillary-marginally-alveolar index = 20 %. The girl catches a cold once or twice a year. Average caries intensity index for this age group in this region is 4. How many times a year should the girl see a dentist?

- |             |               |             |               |               |
|-------------|---------------|-------------|---------------|---------------|
| <i>A. 1</i> | <i>B. 1–2</i> | <i>C. 2</i> | <i>D. 2–3</i> | <i>E. 3–4</i> |
|-------------|---------------|-------------|---------------|---------------|

**11.** Preventive examination of an 8-year-old boy revealed some lusterless chalklike spots on the vestibular surface of the 11 and 21 teeth, which are on the incisal edge in the precervical region. Subjective complaints are absent. What is the most likely diagnosis?

- A. *Acute initial caries*
- B. *White-spotted fluorosis*
- C. *Local enamel hypoplasia*
- D. *Acute superficial caries*
- E. *Chronic initial caries*

**12.** A 3-year-old child complains of a cavity in a lower jaw tooth. Objectively: masticatory surface of the 84 tooth exhibits a carious cavity within mantle dentine. Dentine is softened, probing of the cavity walls is painful, percussion is painless. What is the most likely diagnosis?

- A. *Acute median caries*
- B. *Chronic superficial caries*
- C. *Chronic fibrous pulpitis*
- D. *Acute deep caries*
- E. *Chronic deep caries*

**13.** A 13-year-old girl complains about frequent falling out of a filling in the 21 tooth. It is known from the anamnesis that 2 years ago she underwent treatment on account of a dental trauma. Objectively: a transverse defect of 1/3 of the crown in the 21 tooth. Percussion is painless. Tooth colour is unchanged. X-ray picture shows that root canal is filled by 1 mm from the apex, filling material closely fits the walls of root canal. What stomatological tactics should be chosen?

- A. *The defect should be restored with photopolymer*
- B. *The root canal should be refilled*
- C. *The root apex should be resected*
- D. *The tooth should be extracted*
- E. *The tooth should be crowned with an artificial crown*

**14.** A girl is 18 months old. Vestibular surfaces of the 52,51,61,62 teeth have wide carious cavities within enamel. Probing is slightly painful, percussion of the 52,51, 61,62 is painless. What is the treatment of choice?

- A. *Silver impregnation*
- B. *Filling with amalgam*
- C. *Remineralizing therapy*
- D. *Fluorine lacquer coating*
- E. *Filling with phosphate cement*

**15.** Parents of a 6-year-old child applied to a pedodontist for preventive examination of their child. The oral cavity is sanitized. According to the parents, the child has recently cut the 36 and the 46 tooth. What method of caries prevention should be applied within 1,5–2 years after cutting of the mentioned teeth?

- A. *Fissure hermetization*
- B. *Fissure silvering*
- C. *Coating the teeth with fluorine lacquer Ftorlak*
- D. *Remodentum solution applications*
- E. *Gargling with sodium fluoride*

**16.** Examination of a 6-year-old girl revealed a deep carious cavity in the 85 tooth. Percussion and probing are painless. After removal of the softened dentine communication with the tooth cavity showed up. Deep probing is painless. X- ray picture of the 85 tooth shows the focus of destruction of bone tissue in the region of bifurcation; cortical plate of the 35 has no pathological changes. It is most expedient to use the following material for the root filling:

- A. *Zinc oxide eugenol cement*
- B. *Resorcin-formalin paste*
- C. *Glass ionomer cement*
- D. *Phosphate cement*
- E. *Calcium-containing paste*

**17.** A 13-year-old patient complains about gingival haemorrhage during tooth brushing. Objectively: gums around all the teeth are hyperemic and edematic, PMA index (papillary marginal alveolar index) is 46 %, Greene-Vermillion hygiene index is 2,5. Provisional diagnosis: exacerbation of chronic generalized catarrhal gingivitis. This patient should be recommended to use a toothpaste with the following active component:

- A. *Chlorhexidine*
- B. *Calcium glycerophosphate*
- C. *Monofluorophosphate*
- D. *Vitamins A, D, E*
- E. *Microelement complex*

**18.** A 10-year-old child undergoes sanitation of the oral cavity. The girl was found to have chalky spots on the vestibular surfaces in the precervical region of the 21 and 12 teeth. Enamel surface is dull, smooth. Pain reaction to the temperature stimuli is absent. What additional method of examination is expected to confirm the diagnosis?

- A. *Vital staining*
- B. *Orthopantomography*
- C. *Intraoral roentgenography*
- D. *Electroodontodiagnostics*
- E. *Ultraviolet stomatoscopy*

**19.** Mother of a 6,5-year-old child consulted a dentist about checking fissure hermetization of the 16, 26, 36, 46 teeth. They were treated six months ago. Sealant in the 36, 46 teeth is preserved, but sealant in the 16 and 26 teeth is absent. What is the tactics of choice?

- A. *To repeat fissure hermetization*
- B. *Preventive filling*
- C. *Applications with remodentum solution*
- D. *Coating the teeth with fluorine lacquer Ftorlak*
- E. *Electrophoresis with 1 % sodium fluoride solution*

**20.** A 12-year-old boy complains about short-term pain in a lower jaw tooth on the right caused by cold stimuli. Objectively: the 46 tooth has a carious cavity on the masticatory surface within the circumpulpal dentine which has no intercommunication with the dental cavity. The cavity floor and walls are coated with light softened dentine. Cold test causes short-standing pain. What is the most likely diagnosis?

- A. *Acute deep caries*
- B. *Acute median caries*
- C. *Acute localized pulpitis*
- D. *Acute diffuse pulpitis*
- E. *Chronic fibrous pulpitis*

**21.** Preventive examination of an 8-year- old boy revealed some lusterless chalklike spots on the vestibular surface of the 11 and 21 teeth, which are on the incisal edge in the precervical region. Subjective complaints are absent. What is the most likely diagnosis?

- A. *Acute initial caries*
- B. *White-spotted fluorosis*
- C. *Local enamel hypoplasia*
- D. *Acute superficial caries*
- E. *Chronic initial caries*

**22.** Parents of a 6-year-old child consulted a dentist about oral cavity sanitation. Objectively: the 85 tooth has a carious cavity on the distal surface within the mantle dentine. Floor and walls are dense and pigmented. Probing is painless. Cold stimuli and percussion cause no pain. What is your provisional diagnosis?

- A. *Chronic median caries*
- B. *Acute median caries*
- C. *Chronic deep caries*
- D. *Chronic periodontitis*
- E. *Chronic fibrous pulpitis*

**23.** Preventive examination of a 4-year- old child revealed a deep carious cavity on the masticatory surface of the 54 tooth. The cavity has no intercommunication with the tooth cavity and is filled with dense dentine. Probing, percussion, thermal test of the 54 tooth provoke no pain. The decay/filled index is 1, hygiene index is 1,9. What filling material is the most suitable for permanent filling of the 54 tooth?

- A. *Glass-ionomer cement*
- B. *Silicate cement*
- C. *Silicophosphate cement*
- D. *Chemical composite*
- E. *Photopolymer composite*

**24.** After preventive examination a 10-year-old child was diagnosed with osteoporosis circumscripta of the 13, 12, 11, 21, 22, 23 teeth. The patient was administered electrophoresis with remineralizing solutions. What preparations and in what order are to be applied in this case?

- A. *Calcium and fluoride preparations with the following application of fluoride preparation*
- B. *Fluoride preparations with the following application of calcium and phosphorus preparations*
- C. *Calcium preparations only*
- D. *Phosphorus preparations only*
- E. *Fluoride preparations only*

**25.** A 13-year-old patient complains about gingival haemorrhage during tooth brushing. Objectively: gums around all the teeth are hyperemic and edematous, PMA index (papillary marginal alveolar index) is 46 %, Greene-Vermillion hygiene index is 2,5. Provisional diagnosis: exacerbation of chronic generalized catarrhal gingivitis. This patient should be recommended to use a toothpaste with the following active component:

- A. *Chlorhexidine*
- B. *Calcium glycerophosphate*
- C. *Monofluorophosphate*
- D. *Vitamins A, D, E*
- E. *Microelement complex*



**26.** A 9-year-old child complains about pain caused by sweet and sour food in an upper tooth on the left. Objectively: the 26 tooth has a carious cavity on the masticatory surface within the enamel limits. What is the optimal material to fill the 2 tooth?

- |                                  |                                 |
|----------------------------------|---------------------------------|
| <i>A. Composite</i>              | <i>D. Silicate cement</i>       |
| <i>B. Glass ionomer</i>          | <i>E. Zinc phosphate cement</i> |
| <i>C. Silicophosphate cement</i> |                                 |

**27.** A 10-year-old girl complains of minor pain in a lower jaw tooth on the left during having cold food. Objectively: the masticatory surface of the 36 tooth exhibits a carious cavity with a narrow inlet located within the mantle dentin. Probing causes pain along the enamel-dentin border. Make a diagnosis:

- |                               |                                 |
|-------------------------------|---------------------------------|
| <i>A. Acute median caries</i> | <i>D. Superficial caries</i>    |
| <i>B. Acute deep caries</i>   | <i>E. Chronic median caries</i> |
| <i>C. Chronic deep caries</i> |                                 |

**28.** A 5-year-old child presents with chronic deep caries within the contact and masticatory surfaces of the 75, 74, 84, 85 teeth. Which filling material should be used?

- |                          |                   |                    |
|--------------------------|-------------------|--------------------|
| <i>A. Silver amalgam</i> | <i>C. Evicrol</i> | <i>E. Infantid</i> |
| <i>B. Silidont</i>       | <i>D. Silicin</i> |                    |

**29.** Parents of a 12-year-old child complain about white patches on the upper front teeth, which appeared six months ago. Objectively: chalk-like patches on the vestibular surfaces in the precervical area of the 13, 12, 11, 21, 22, 23 teeth. Their enamel is dull, pliable and rough on probing. There is a history of short-term pain caused by chemical stimuli. What is your provisional diagnosis?

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| <i>A. Acute initial caries</i>     | <i>D. Systemic enamel hypoplasia</i> |
| <i>B. Chronic initial caries</i>   | <i>E. Dental fluorosis</i>           |
| <i>C. Acute superficial caries</i> |                                      |

**30.** An 11-year-old child complains of a carious cavity in the left upper molar, which appeared six months ago. Objectively: the medial contact surface of the 26 tooth exhibits a carious cavity located within the mantle dentin. The cavity floor and walls are dense, pigmented, with no pain upon probing. The response to thermal stimuli is absent. Percussion of the tooth causes no pain. Make a provisional diagnosis:

- |                                 |                                 |
|---------------------------------|---------------------------------|
| <i>A. Chronic median caries</i> | <i>D. Acute deep caries</i>     |
| <i>B. Chronic deep caries</i>   | <i>E. Chronic periodontitis</i> |
| <i>C. Acute median caries</i>   |                                 |

**31.** Mother of a 3-year-old child complains about white spots on the upper anterior teeth of her child. Objectively: the vestibular surface of the 51 and 61 teeth exhibits a defect within the enamel. Probing is painless. What is the optimal method of treatment?

- |   |
|---|
| <i>A. Impregnation with silver nitrate solution</i>   |
| <i>B. Treatment with fluorine lacquer</i>             |
| <i>C. Remodentum application</i>                      |
| <i>D. Preparation and filling</i>                     |
| <i>E. Electrophoresis of sodium fluoride solution</i> |

**32.** Preventive examination of a 4,5-year- old child revealed some hidden cavities on the contact surfaces of the 54 and 55 teeth. After removal of the overhanging edges of the enamel the softened dentin could be easily removed within the mantle dentin. Select the optimal material for a permanent filling:

- A. *Compomer material*
- B. *Composite material*
- C. *Silicate cement*
- D. *Silicophosphate cement*
- E. *Polycarboxylate cement*

**33.** Preventive examination of an 8-year- old boy revealed some lusterless chalklike spots on the vestibular surface of the 11 and 21 teeth, which are on the incisal edge in the precervical region. Subjective complaints are absent. What is the most likely diagnosis?

- A. *Acute initial caries*
- B. *White-spotted fluorosis*
- C. *Local enamel hypoplasia*
- D. *Acute superficial caries*
- E. *Chronic initial caries*

**34.** Examination of an 8-year-old child revealed irregular white spots on the vestibular surface in the precervical region of the 11 and 12 teeth. The spots are smooth and stainable. What is the most likely diagnosis?

- A. *Focal demineralization*
- B. *Enamel hypoplasia*
- C. *Superficial caries*
- D. *Enamel erosion*
- E. *Fournier's teeth*

**35.** Parents of a 12-year-old child complain of white patches on the upper front teeth, which appeared six months ago. Objectively: chalk-like patches on the vestibular surfaces in the precervical region of the 13, 12, 11, 21, 22, 23 teeth. Their enamel is dull, pliable and rough on probing. There is a history of short-term pain caused by chemical stimuli. What is your provisional diagnosis?

- A. *Acute initial caries*
- B. *Chronic initial caries*
- C. *Acute superficial caries*
- D. *Systemic enamel hypoplasia*
- E. *Dental fluorosis*

**36.** A 13-year-old girl complains about frequent falling out of a filling in the 21 tooth. It is known from the anamnesis that 2 years ago she underwent treatment on account of a dental trauma. Objectively: a transverse defect of 1/3 of the crown in the 21 tooth. Percussion is painless. Tooth colour is unchanged. X-ray picture shows that root canal is filled by 1 mm from the apex, filling material closely fits the walls of root canal. What stomatological tactics should be chosen?

- A. *The defect should be restored with photopolymer*
- B. *The root canal should be refilled*
- C. *The root apex should be resected*
- D. *The tooth should be extracted*
- E. *The tooth should be crowned with an artificial crown*

**37.** Parents of a 6-year-old child applied to a pedodontist for preventive examination of their child. The oral cavity is sanitized. According to the parents, the child has recently cut the 36 and the 46 tooth. What method of caries prevention should be applied within 1,5–2 years after cutting of the mentioned teeth?

- A. Fissure hermetization*
- B. Fissure silvering*
- C. Coating the teeth with fluorine lacquer Ftorlak*
- D. Remodentum solution applications*
- E. Gargling with sodium fluoride*

**38.** A 10-year-old child undergoes sanitation of the oral cavity. The girl was found to have chalky spots on the vestibular surfaces in the precervical region of the 21 and 12 teeth. Enamel surface is dull, smooth. Pain reaction to the temperature stimuli is absent. What additional method of examination is expected to confirm the diagnosis?

- A. Vital staining*
- B. Orthopantomography*
- C. Intraoral roentgenography*
- D. Electroodontodiagnostics*
- E. Ultraviolet stomatoscopy*

**39.** A 9-year-old child complains of pain caused by sweet and sour food in an upper tooth on the left. Objectively: the 26 tooth has a carious cavity on the masticatory surface within the enamel limits. What is the optimal material to fill the 26 tooth?

- A. Composite*
- B. Glass ionomer*
- C. Silicophosphate cement*
- D. Silicate cement*
- E. Zinc phosphate cement*

**40.** Parents of a 7,5-year old child brought him to the dentist for oral cavity sanitation. Objectively: DEF (for primary teeth) + DMF (for permanent teeth) index = 4, Green-Vermillion index = 2,5. Fissures of the first permanent molars are open, intact, non-pigmented. What method of primary prevention of dental caries may be appropriate in this case?

- A. Non-invasive hermetization*
- B. Invasive hermetization*
- C. Application of fluoride varnish*
- D. Application of antibacterial varnish*
- E. Application of calcium gels*

**41.** Examination of a 9-year-old child revealed chalky spots in the cervical part of the 12, 11, 21, 22 teeth. The spots appeared two weeks ago. Their surface is dull in appearance and can be stained with methylene blue. The affected teeth are nonresponsive to cold stimulus. What is the most likely diagnosis?

- A. White spot stage of caries*
- B. Fluorosis*
- C. Systemic hypoplasia*
- D. Surface caries*
- E. Focal hypoplasia*

**42.** Preventive examination of a 4,5-year-old child revealed some hidden cavities on the contact surfaces of the 54 and 55 teeth. After removal of the overhanging edges of the enamel the softened dentin could be easily removed with an excavator within the mantle dentin. Select the optimal material for a permanent filling:

- A. *Compomer material*
- B. *Composite material*
- C. *Silicate cement*
- D. *Silicophosphate cement*
- E. *Polycarboxylate cement*

**43.** A 13-year-old child complains of a short-term pain caused by cold stimuli in the upper left molar tooth. Occlusal surface of the 27 tooth has a cavity with a small hole. After the overhanging enamel had been removed, the soft light dentin could be easily removed with an excavator within mantle dentin. What is the most likely diagnosis?

- A. *Acute median caries*
- B. *Chronic median caries*
- C. *Acute deep caries*
- D. *Acute surface caries*
- E. *Chronic surface caries*

**44.** Preventive examination of a 13,5-year-old child revealed congestive hyperemia and a slight edema of the gingival margin in the region of the front teeth on both jaws. The patient has periodic gingival haemorrhages during tooth brushing. DMF index is 2. What kind of toothpaste should be recommended for the individual oral hygiene?

- A. *Toothpaste containing herbal extracts*
- B. *Toothpaste containing calcium*
- C. *Toothpaste containing aminofluorides*
- D. *Toothpaste containing sodium fluoride*
- E. *Toothpaste containing salt additives*

**45.** Parents of a 7,5-year old child brought him to a dentist for oral cavity sanitation. Objectively: DEF (for primary teeth) + DMF (for permanent teeth) index = 4, Green-Vermillion index = 2,5. Fissures of the first permanent molars are open, intact, non-pigmented. What method of primary prevention of dental caries may be appropriate in this case?

- A. *Non-invasive hermetization*
- B. *Invasive hermetization*
- C. *Application of fluoride varnish*
- D. *Application of antibacterial varnish*
- E. *Application of calcium gels*

**46.** A 14-year-old child has been lately complaining about overgrowth and permanent bleeding of gums during tooth brushing. Objectively: gingival papillae in the anterior part of both jaws are swollen, hyperemic, overlap the tooth crowns by 1/3 of their height, bleed easily during the instrumental examination. Caries intensity is of average level. Hygiene of the oral cavity is not satisfactory. In this case it is advisable to recommend a toothpaste containing:

- A. *Aluminum compounds*
- B. *Zinc compounds*
- C. *Calcium compounds*
- D. *Fluorine compounds*
- E. *Pyrophosphate*

**47.** Objective examination of a 4-year-old child revealed caries in the 74, 84 teeth, abnormal attachment of the upper lip frenulum, which does not require surgical correction. The value of Fedorov – Volodkina oral hygiene index is 1,8. How many times a year the child should see a dentist if the average caries intensity in the respective age group in the given region is 3?

- A. *Once*      B. *Twice*      C. *2–3 times*      D. *3 times*      E. *3–4 times*

**48.** Parents of a 3-year-old child took the child to a pedodontist for oral sanitation. The child has cerebral palsy. Objectively: there is multiple dental caries, gingival mucosa is hyperemic, oral hygiene is inadequate. What method of dental health care may be appropriate in this case?

- A. *Under general anesthesia*      D. *Without anesthesia*  
B. *Under local anesthesia injection*      E. *Giving sedatives*  
C. *Under local application anesthesia*

**49.** Parents of a 3-year-old child took the child to a pedodontist for complex dental care. The child has cerebral palsy. Objectively: there is multiple dental caries, gingival mucosa is hyperemic, oral hygiene is inadequate. What method of dental care may be appropriate in this case?

- A. *Under general anesthesia*  
B. *Under local injection anesthesia*  
C. *Under local application anesthesia*  
D. *Without anesthesia*  
E. *Treatment after administration of sedatives*

**50.** A 6-year-old child complains of pain in a mandibular tooth on the left during eating. Objectively: masticatory surface of the 36 tooth exhibits a cari-ous cavity within the mantle dentin. The cavity is full of light softened dentin which can be easily removed with an excavator. Probing of the cavity walls causes pain response. The teeth are sensitive to thermal stimuli, the pain is of short-term nature. There is no response to percussion. Select the optimal filling material:

- A. *Silver amalgam*      D. *Silicophosphate cement*  
B. *Zinc phosphate cement*      E. *Polycarboxylate cement*  
C. *Silicate cement*

**51.** A 13-year-old child complains of having a cavity in the front maxillary teeth. Contact medial surfaces of the 11 and 21 teeth exhibit cavities found within the mantle dentine and filled with dense pigmented dentin. Probing of the cavity floor causes no pain response, neither does dental percussion. Select the best filling material for the permanent seals:

- A. *Resin composite*      D. *Zinc phosphate cement*  
B. *Silicate cement*      E. *Glass ionomer cement*  
C. *Silicophosphate cement*

**52.** An 11-year-old boy complains of a carious cavity in a mandibular tooth on the right. Objectively: the 46 tooth exhibits a carious cavity within the mantle dentin. The dentin is dense, pigmented; there is pain response to the cold stimulus, probing and percussion cause no pain response. Make a provisional diagnosis:

- |                                 |                                      |
|---------------------------------|--------------------------------------|
| <i>A. Chronic median caries</i> | <i>D. Chronic deep caries</i>        |
| <i>B. Acute median caries</i>   | <i>E. Chronic superficial caries</i> |
| <i>C. Acute deep caries</i>     |                                      |

**53.** An 11-year-old boy complains of a short-term pain from the cold in a left mandibular tooth. Objectively: the medial surface of the 36 tooth exhibits a carious cavity within parapulpal dentin. The cavity is filled with light, softened dentin and does not communicate with the cavity of the tooth. Probing the of the 36 tooth floor causes pain response, the tooth is not sensitive to percussion, the response to the cold stimulus does not stay long after its removal. What is the most likely diagnosis?

- |                                  |                                    |
|----------------------------------|------------------------------------|
| <i>A. Acute deep caries</i>      | <i>D. Chronic fibrous pulpitis</i> |
| <i>B. Acute focal pulpitis</i>   | <i>E. Acute median caries</i>      |
| <i>C. Acute diffuse pulpitis</i> |                                    |

**54.** Examination of a 9-year-old child revealed chalky spots in the cervical zone of the 12, 11, 21, 22 teeth. The spots appeared two weeks ago. Lustreless surface of the spots is stainable with methylene blue. The affected teeth are not sensitive to the cold stimulus. Specify the physician's tactics in respect of the affected teeth:

- |                                  |                                      |
|----------------------------------|--------------------------------------|
| <i>A. Remineralizing therapy</i> | <i>C. Grinding of affected areas</i> |
| <i>B. Impregnation therapy</i>   | <i>D. Case follow-up</i>             |

**55.** Parents of an 8-year-old child complain about the presence of chalky spots on the child's front maxillary teeth which have recently erupted. Objectively: the vestibular surfaces of the 11 and 12 teeth exhibit white spots in the cervical zone. Enamel at these sites is not transparent. What additional test can be used?

- |   |                              |
|---|------------------------------|
| <i>A. Staining with methylene blue</i>              | <i>D. Electric pulp test</i> |
| <i>B. Radiography</i>                               | <i>E. Radiovisiotherapy</i>  |
| <i>C. Staining with iodine-containing solutions</i> |                              |

**56.** A 12-year-old girl complains of white spots on the vestibular surfaces of teeth and mouth soreness that occurs during eating sour foods. It is known from the history that the spots appeared about 3 months ago. Objectively: the vestibular surfaces of the front maxillary teeth exhibit chalky spots that are stainable with 2% methylene blue. What is the most likely diagnosis?

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| <i>A. Acute initial caries</i>     | <i>D. Chronic median caries</i>      |
| <i>B. Acute superficial caries</i> | <i>E. Chronic superficial caries</i> |
| <i>C. Acute median caries</i>      |                                      |

57. Preventive examination of a 4,5-year- old child revealed some hidden cavities on the contact surfaces of the 54 and 55 teeth. After removal of the overhanging edges of the enamel the softened dentin could be easily removed with an excavator within the mantle dentin. Select the optimal material for a permanent filling:

- |                       |                           |
|-----------------------|---------------------------|
| A. Compomer material  | D. Silicophosphate cement |
| B. Composite material | E. Polycarboxylate cement |
| C. Silicate cement    |                           |

58. A 12-year-old girl has complaint of carious cavity in a tooth. Objectively: there is class I carious cavity according to the Black's classification in the 36th tooth; it is localised in the parapulpal sulcus; the mouth of the cavity is wide. The dentin is dense and pigmented. It is sensitive to cold stimulus, percussion is painless. What is the most probable diagnosis?

- |                          |                        |
|--------------------------|------------------------|
| A. Chronic deep caries   | D. Acute median caries |
| B. Chronic median caries | E. —                   |
| C. Acute deep caries     |                        |

59. Parents of a 12-year-old child are concerned about the child having white spots on the frontal teeth of the upper jaw; the spots appeared half a year ago. Objectively: there are chalky spots detected in the cervical zone of the 11th, 12th, 13th, 21st, 22<sup>nd</sup>, 23<sup>rd</sup> teeth vestibular surface. The enamel in those spots is dull; probing revealed it to be pliant and coarse. The anamnesis states short-time pain caused by chemical stimuli. What is the provisional diagnosis?

- |                             |                                  |
|-----------------------------|----------------------------------|
| A. Acute initial caries     | D. Systemic hypoplasia of enamel |
| B. Chronic initial caries   | E. Dental fluorosis              |
| C. Acute superficial caries |                                  |

60. A 6,5-year-old child has closed non-pigmented fissures in the first permanent molar, which have been revealed during preventive examination. Enamel transparency is retained, its probing does not reveal any coarseness. Choose the optimal method of treatment in this case.

- |                         |                             |
|-------------------------|-----------------------------|
| A. Non-invasive sealing | D. ART technique            |
| B. Invasive sealing     | E. Regular medical check-up |
| C. Preventive filling   |                             |

61. Parents of a 7,5-year old child brought him to a dentist for oral cavity sanitation. Objectively: DEF (for primary teeth) + DMF (for permanent teeth) index = 4, Green-Vermillion index = 2,5. Fissures of the first permanent molars are open, intact, non-pigmented. What method of primary prevention of dental caries may be appropriate in this case?

- |                                    |   |
|------------------------------------|---|
| A. Non-invasive hermetization      | D. Application of antibacterial varnish |
| B. Invasive hermetization          | E. Application of calcium gels          |
| C. Application of fluoride varnish |   |

**62.** Parents of a 5-year-old child has made an appointment with a dentist for preventive examination of their child. Objectively: the DMF index (Decayed, Missing, Filled)=5, the gingival mucosa is pale pink in colour, Fedorov-Volodkina index is 2,5. For oral hygiene the child should use a toothbrush with the following kind of bristle:

- |                  |                      |                      |
|------------------|----------------------|----------------------|
| <i>A. Soft</i>   | <i>C. Hard</i>       | <i>E. Extra-hard</i> |
| <i>B. Medium</i> | <i>D. Extra-soft</i> |                      |

**63.** A 16-year-old girl complains of cosmetic defect of the front teeth - there are dark spots and hard tissues defects. The spots were detected in the process of teething, the defects developed later. The following diagnosis was made: erosive form of fluorosis of the 16th, 11th, 12th, 22nd, 26<sup>th</sup>, 31<sup>st</sup>, 32<sup>nd</sup>, 36<sup>th</sup>, 41<sup>st</sup>, 42<sup>nd</sup>, 46<sup>th</sup> teeth. Choose the method of treatment.

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| <i>A. Restoration treatment</i>      | <i>D. Surgical treatment</i>       |
| <i>B. Remineralization treatment</i> | <i>E. Regular medical check-up</i> |
| <i>C. Prosthetics</i>                |                                    |

## **2. Noncaries lesion of hard dental tissues**

**1.** A 16 year old patient complains of a cosmetic defect in the area of his upper frontal teeth in form of white spots that were revealed long ago and haven't changed since that. Objectively: there are white spots on the vestibular surfaces of the 11, 12, 21, 22 teeth by the cutting edge and on the vestibular surfaces of the 16, 26, 36, 46 teeth close by the masticatory surface. Probing showed that the spot surface was smooth, painless; reaction to the cold stimulus was painless. The spots couldn't be stained by 2 % solution of methylene blue. What is the most probable diagnosis?

- |                                      |   |
|--------------------------------------|---|
| <i>A. Systemic enamel hypoplasia</i> | <i>D. Fluorosis, spotty form</i>        |
| <i>B. Local enamel hypoplasia</i>    | <i>E. Erosion of hard tooth tissues</i> |
| <i>C. Acute initial caries</i>       |   |

**2.** Preventive examination of an 8 year old boy revealed matted chalky spots on the vestibular surface of the 11 and 21 teeth localized in the precervical area. The child has no subjective complaints. What is the most probable diagnosis?

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| <i>A. Acute initial caries</i>    | <i>D. Acute superficial caries</i> |
| <i>B. Spotty fluorosis</i>        | <i>E. Chronic initial caries</i>   |
| <i>C. Local enamel hypoplasia</i> |                                    |

**3.** A 17 year old girl applied to a dental clinic and complained about hard tissue defects on her frontal and lateral teeth. Subjectively these defects don't cause any inconvenience. Crown defects appeared long ago. The patient was born and has been living in an area where fluorine concentration in the drinking water makes up 1,2 mg/l. Objectively: on the vestibular surfaces of incisors on both upper and lower jaws in the equator area there are hard tissue defects within deep layers of enamel. The defects are parallel to the cutting edge. The same defects were revealed in the area



of tubera of the first molars, floor and walls of the defects are smooth. Enamel of the defect floor is light-brown. What is the most probable diagnosis?

- A. *Systemic hypoplasia*
- B. *Local hypoplasia*
- C. *Focal odontodysplasia*
- D. *Endemic fluorosis*
- E. *Erosion of hard tissues of tooth*

4. A 7 year old girl was brought to a hospital for the purpose of oral cavity sanitation. She was born and has been living in an area where fluorine concentration in water makes up 2,5 mg/l. Examination revealed symmetrically placed dark spots on the vestibular surfaces of the 11, 21, 31, 41 teeth as well as on the tubera of the 16, 26, 36, 46 teeth. It is known from the anamnesis that the teeth cut out already with affection. What is the most probable diagnosis?

- A. *Tooth fluorosis*
- B. *Odontogenesis imperfecta*
- C. *Amelogenesis imperfecta*
- D. *Systemic enamel hypoplasia*
- E. *Local enamel hypoplasia*

5. A 16-year-old patient complains about a cosmetic defect in form of white spots in the region of the upper frontal teeth. The defect was revealed long ago and doesn't change with time. Objectively: white spots on the vestibular surfaces of the 11, 12, 21, 22 teeth close to the cutting edge and on the vestibular surfaces of the 16, 26, 36, 46 teeth close to the masticatory surface. On probing the spot surface was smooth, painless; cold stimulus produced no pain. The spots couldn't be stained with 2 % solution of methylene blue. What is the most likely diagnosis?

- A. *Systemic enamel hypoplasia*
- B. *Local enamel hypoplasia*
- C. *Acute initial caries*
- D. *Fluorosis in form of spots*
- E. *Erosion of dental solid tissues*

6. Stomatological examination of a child revealed abnormal form of the central incisors: they are barrel-shaped, there is a semilunar groove on the cutting edge. It is known from the anamnesis that the child's mother had syphilis during pregnancy. Besides the dental abnormality the child presents also with deafness and parenchymatous keratitis. This abnormality of tooth development is called:

- A. *Hutchinson's teeth*
- B. *Pfluger teeth*
- C. *Wedge-shaped defect*
- D. *Fluorosis (destructive form)*
- E. *Erosion of hard tissues*

7. A 14-year-old child complains about a cosmetic defect in the frontal teeth region. Objectively: enamel of the 11, 12, 21, 22, 31, 32, 41, 42 teeth is thin in the region of cutting edge, there is a sulcate enamel pit 1,5 mm wide which encircles the tooth and is parallel to the cutting edge. The cusps of the 16, 26, 36, 46 teeth are underdeveloped and have conical form. What is the most likely diagnosis?

- A. *Systemic hypoplasia*
- B. *Dentinogenesis imperfecta*
- C. *Enamel dysplasia*
- D. *Local hypoplasia*
- E. *Enamel hypoplasia*

**8.** The 12, 22 teeth of an 8-year-old child are missing. There is not enough space in dentition for them. X-ray picture shows no tooth germs. The 12 tooth of the child's father is missing and the 22 tooth is conoid. What is the reason for such pathological changes?

A. *Hereditary adentia*

D. *Trauma*

B. *Caries*

E. *Rachitis*

C. *Extraction of teeth*

**9.** A 14-year-old girl complains about an aesthetic defect in form of white spots on her teeth. Fluorine concentration in the drinking water in the area of her residence is 2 mg/l. Objectively: vestibular surfaces of all teeth are covered with ill-defined white spots. What is the most likely diagnosis?

A. *Fluorosis*

D. *Multiple caries*

B. *Local hypoplasia*

E. *Amelogenesis imperfect*

C. *Systemic hypoplasia*

**10.** A 14-year-old child complains about an aesthetic defect in the frontal teeth region. Objectively: enamel of the 11, 12, 21, 22, 31, 32, 41, 42 teeth is thin in the region of cutting edge, there is a sulcate enamel pit 1,5 mm wide which encircles the tooth and is parallel to the cutting edge. The cusps of the 16, 26, 36, 46 teeth are underdeveloped and have conical form. What is the most likely diagnosis?

A. *Systemic hypoplasia*

B. *Dentinogenesis imperfecta*

C. *Enamel dysplasia*

D. *Local hypoplasia*

**11.** A girl is 13 years old. She lives in an area where fluoride concentration in the drinking water is at the rate of 1,6 mg/l. Dental examination revealed some chalklike spots on the vestibular surfaces of all her teeth. The white coloration is more intense in the centre and less on the periphery. There is light-brown pigmentation in the region of the central incisors along the cutting edge. What is the most likely diagnosis?

A. *Dental fluorosis*

D. *Stainton-Capdepont syndrome*

B. *Acute initial caries*

E. *Amelogenesis imperfecta*

C. *Systemic enamel hypoplasia*

**12.** A 17-year-old man complains of an aesthetic defect in form of light spots on the teeth. In the area of his residence the fluoride concentration in drinking water is at the rate of 1 mg/l. Objectively: vestibular surface of the 11, 12, 21, 22, and tubercles of the 16, 26, 36 and 46 teeth have chalky spots with shiny surface that have been present since the time of eruption. What is the most likely diagnosis?

A. *Systemic hypoplasia*

C. *Endemic fluorosis*

B. *Multiple caries*

E. *Amelogenesis imperfect*

D. *Enamel erosion*

**13.** Mother of a 3-year-old child consults about discolouration and abrasion of the child's teeth. The child has a history of enamel spalling shortly after the tooth eruption. Objectively: the crowns of all the teeth are worn by nearly a half and have yellow-gray colour. Make a provisional diagnosis:

- |                                      |                                      |
|--------------------------------------|--------------------------------------|
| <i>A. Stainton-Capdepon syndrome</i> | <i>D. Osteogenesis imperfecta</i>    |
| <i>B. Amelogenesis imperfecta</i>    | <i>E. Systemic enamel hypoplasia</i> |
| <i>C. Dentinogenesis imperfecta</i>  |                                      |

**14.** Routine examination of a 9-year-old girl revealed symmetrical horizontal grooves on the vestibular surfaces of the 16, 12, 11, 21, 22, 26, 31, 32, 36, 41, 42, 46 teeth. The grooves alternated with intact tooth tissues and were present in these teeth at the time of their eruption. The patient has a history record of pneumonia at the age of 10 months treated with a course of antibiotics. Make a diagnosis:

- |                               |                            |
|-------------------------------|----------------------------|
| <i>A. Systemic hypoplasia</i> | <i>D. Dental fluorosis</i> |
| <i>B. Local hypoplasia</i>    | <i>E. Initial caries</i>   |
| <i>C. Focal hypoplasia</i>    |                            |

**15.** A 9-year-old boy requires complex dental care. Objective examination revealed chalky spots with lustrous surface on the vestibular surfaces of the 22, 21, 11, 12 teeth, as well as on the tubercles of the 26, 26, 46 teeth. The affected teeth are not sensitive to thermal and chemical stimuli. The child has a previous history of rickets. He lives in a locality where the fluoride concentration in drinking water is 0,5 mg/l. What is the most likely diagnosis?

- |                                      |                                   |
|--------------------------------------|-----------------------------------|
| <i>A. Systemic enamel hypoplasia</i> | <i>D. Local enamel hypoplasia</i> |
| <i>B. Fluorosis</i>                  | <i>E. Amelogenesis imperfecta</i> |
| <i>C. Stainton-Capdepon syndrome</i> |                                   |

**16.** During examination of an 8-year-old child were spots detected on the vestibular surface of the 11th, 12th, 21st and 22nd teeth. The spots are pearly-white, glossy, painless when probed, and gradually merge with non-changed enamel. Ultraviolet irradiation revealed the spots to fluoresce blue. The child has been living up to the age of 3 in the region, where fluorine content of drinking water was 2 mg/l. What kind of non-carious lesion is it?

- |                                    |                               |
|------------------------------------|-------------------------------|
| <i>A. Fluorosis, speckled form</i> | <i>D. Local hypoplasia</i>    |
| <i>B. Fluorosis, lined form</i>    | <i>E. Systemic hypoplasia</i> |
| <i>C. Fluorosis, erosive form</i>  |                               |

### **3. Pulpitis and periodontitis**

**1.** A virtually healthy 9 year old child complains about crown fracture and pain in the right superior frontal tooth. Objectively: crown part of the 11 tooth is broken by 1/3, pulp is pointwise dehiscent, it is red, acutely painful and bleeds during probing. Percussion is slightly painful. The child got a trauma several hours ago. Choose an optimal treatment method:

- |                              |                               |
|------------------------------|-------------------------------|
| <i>A. Biological method</i>  | <i>D. Vital extirpation</i>   |
| <i>B. Vital amputation</i>   | <i>E. Devital extirpation</i> |
| <i>C. Devital amputation</i> |                               |

2. An 8 year old child has a carious cavity on the masticatory surface of the 16 tooth within circumpulpal dentin. Probing of cavity floor is painful, dentin is softened, slightly pigmented. Cold stimulus causes short-term pain. Choose a dental treatment paste:

- A. *Hydroxycalcium-containing*
- B. *Resorcin-formaline*
- C. *Paraformaldehyde*
- D. *Arsenious*
- E. *Thymol*

3. A 7 year old child complains of spontaneous pain in the upper right molar teeth. Examination of medial contact and masticatory surfaces of the 55 tooth revealed a carious cavity composed of softened light dentin and localized within circumpulpal dentin. Floor probing is acutely painful, tooth percussion is slightly painful. Mucous membrane of the alveolar process in projection of 55 tooth roots is intact, there are no roentgenological changes in this area. What is the most probable diagnosis?

- A. *Acute diffuse pulpitis*
- B. *Chronic fibrous pulpitis*
- C. *Chronic gangrenous pulpitis*
- D. *Exacerbation of chronic periodontitis*
- E. *Acute deep caries*

4. An 8 year old child complains about permanent dull pain in the 46 tooth that is getting stronger during cutting. The pain appeared 1 day ago. Previously there has been pain induced by cold stimuli. Objectively: there is a deep carious cavity on the masticatory surface of the 46 tooth, tooth cavity is closed, probing and temperature stimuli cause no pain reaction. Percussion is painful, a slight mobility is present. Gum around the 46 tooth is hyperemic, edematic, palpatory painful. X-ray picture shows no changes near the apex of undeveloped roots. What is your provisional diagnosis?

- A. *Acute serous periodontitis*
- B. *Acute purulent pulpitis*
- C. *Acute general serous pulpitis*
- D. *Acute purulent periodontitis*
- E. *Acute condition of chronic periodontitis*

5. Examination of a 6 year old child revealed a deep carious cavity in the 85 tooth. Percussion and probing are painless. Removal of softened dentin resulted in intercommunication with tooth cavity. Deep probing is painful. X-ray picture of the 85 tooth shows a focus of bony tissue destruction in the area of bifurcation, cortical plate of the 35 tooth has no pathological changes. What paste should be applied for the root filling in this case?

- A. *Zink-eugenol paste*
- B. *Resorcin-formaline paste*
- C. *Glass-ionomer cement*
- D. *Phosphate cement*
- E. *Calcium-containing paste*

6. A 13 year old boy complains about pain in the 46 tooth induced by cold stimuli. Objectively: there is a deep carious cavity on the masticatory surface of the 46 tooth within light softened circumpulpal dentin. Probing of carious cavity floor is overall painful, cold stimulus causes acute pain that is quickly relieved after the stimulus' elimination. Choose an optimal dental treatment paste:

- A. *Hydroxycalcium-containing*
- B. *Thymol*
- C. *Iodoform*
- D. *Resorcin-formaline*
- E. *Zink-eugenol*

7. An 8 year old child has a deep carious cavity communicating with tooth cavity on the distaloapproximal surface of the 75 tooth. Probing is painful, percussion is painless, cold water causes slowly abating pain. The tooth decayed a few months ago, wasn't treated. What treatment method is to be applied in this case?

- A. *Devital amputation*
- B. *Biological method*
- C. *Vital extirpation*
- D. *Vital amputation*
- E. *Devital extirpation*

8. An 8 year old child complains about pain in the 21 tooth that is getting worse during cutting. A month ago a part of tooth crown broke off as a result of a fall. The child didn't consult a dentist. Objectively: in the area of medial angle of the 21 tooth there is a crown defect that makes up 1/3 of the crown's height. Tooth cavity is open, probing and thermal stimulus causes no pain. Percussion is acutely painful. Gum around the 21 tooth is edematous and hyperemic. What is the provisional diagnosis?

- A. *Acute condition of chronic periodontitis*
- B. *Acute condition of chronic pulpitis*
- C. *Acute serous periodontitis*
- D. *Acute purulent periodontitis*
- E. *Pulpitis complicated by periodontitis*

9. A 9 year old child complains about pain and swelling of soft tissues beneath his mandible on the right. Objectively: general condition is satisfactory; there is face asymmetry due to the inflammatory infiltration and collateral tissue edema in the right submandibular area. Crown of the 85 tooth is decayed, mucous membrane of gums in the area of the 84, 85, 46 teeth is hyperemic, edematous; mucogingival fold is flattened. What treatment should be administered?

- A. *Extraction of the 85 tooth*
- B. *Endodontic treatment of the 85 tooth*
- C. *Extraction of the 85 tooth and incision along the mucogingival fold*
- D. *Periosteotomy*
- E. *Endodontic treatment of the 85 tooth and periosteotomy*

**10.** An 11 year old girl complains about bleeding of a tooth on her lower jaw during eating and tooth brushing. This tooth hurt her before but she didn't consult a dentist. Examination of the 46 tooth revealed a deep cavity communicating with tooth cavity and filled with red growth tissue. Probing causes a slight haemorrhage and pain, percussion is painless, cold stimulus cause mild pain. What is the most probable diagnosis?

- A. *Chronic hypertrophic pulpitis*
- B. *Chronic granulating periodontitis*
- C. *Chronic papillitis*
- D. *Gingival polyp*
- E. *Chronic simple pulpitis*

**11.** A 13 year old child complains about acute spontaneous short-term attack-like pain in the area of the 36 tooth that is getting worse during eating. The pain appeared yesterday. Objectively: there is a deep carious cavity on the masticatory surface of the 36 tooth. Tooth cavity is closed, floor probing is painful in one point. Cold stimulus causes short-term pain. Make a diagnosis:

- A. *Acute localized pulpitis*
- B. *Acute deep caries*
- C. *Accute diffuse pulpitis*
- D. *Chronic fibrous pulpitis*
- E. *Acute condition of chronic pulpitis*

**12.** A 20-year-old patient complains about a carious cavity in an upper right tooth. Objectively: the 16 tooth has a deep carious cavity communicating with the tooth cavity, probing at the opening point is painless, percussion of the 16 causes mild pain. There is a fistula on the gingiva in the region of root apex projection of the 16 tooth. What is the most probable diagnosis?

- A. *Chronic granulating periodontitis*
- B. *Chronic fibrous periodontitis*
- C. *Chronic granulomatous periodontitis*
- D. *Chronic hypertrophic pulpitis*
- E. *Chronic gangrenous pulpitis*

**13.** A 10-year-old child complains about acute spontaneous spasmodic pain in an upper jaw tooth on the left. Objectively: distal contact surface of the 26 tooth exhibits a carious cavity filled with light softened dentine and localized within parapulpal dentine. Probing of the cavity floor causes acute pain, percussion is painless. Cold stimuli cause a long-standing pain attack. The child has a history of lidocaine allergy. Choose an optimal paste to be used during the first visit:

- A. *Paraformaldehyde*
- B. *Iodoform*
- C. *Thymol*
- D. *Formocresol*
- E. *Zinc oxide eugenol*

**14.** A 7-year-old child complains about spontaneous pain in the upper right molars. Both medial contact and masticatory surfaces of the 55 tooth have a carious cavity filled with clear softened dentin and localized within parapulpal dentin. Floor probing causes acute pain, tooth percussion is slightly painful. Mucous membrane of the alveolar process in the root projection of the 55 is intact, examination of this region revealed no roentgenological changes. What is the most likely diagnosis?

- A. *Acute diffuse pulpitis*
- B. *Chronic fibrous pulpitis*
- C. *Chronic gangrenous pulpitis*
- D. *Exacerbation of chronic periodontitis*
- E. *Deep acute caries*

**15.** Parents of a 2-year-old girl complain about fistulas with purulent discharge in the region of the upper frontal teeth. Objectively: crowns of the 51, 52, 61, 62 teeth are significantly decayed, probing of root canal orifices is slightly painful, it causes significant haemorrhage. Percussion is painless. Mucous membrane of the alveolar process is pastose and cyanotic, there are cicatrices and fistulas in this region. What is the most likely diagnosis?

- A. *Exacerbation of chronic granulating periodontitis*
- B. *Exacerbation of chronic granulomatous periodontitis*
- C. *Exacerbation of chronic fibrous periodontitis*
- D. *Chronic granulomatous periodontitis*
- E. *Chronic granulating periodontitis*

**16.** Examination of a 6-year-old girl revealed a deep carious cavity in the 85 tooth. Percussion and probing are painless. After removal of the softened dentine communication with the tooth cavity showed up. Deep probing is painless. X-ray picture of the 85 tooth shows the focus of destruction of bone tissue in the region of bifurcation; cortical plate of the 35 has no pathological changes. It is most expedient to use the following material for the root filling:

- A. *Zinc oxide eugenol cement*
- B. *Resorcin-formalin paste*
- C. *Glass ionomer cement*
- D. *Phosphate cement*
- E. *Calcium-containing paste*

**17.** A 12-year-old child complains about bleeding from the tooth socket during eating and tooth brushing. The tooth has hurt him before. Objectively: the 36 tooth has a deep cavity communicating with the tooth cavity and filled with red excrescences. Probing causes pain and slight haemorrhage; percussion is painless, thermal stimuli cause mild pain. What is your provisional diagnosis?

- A. *Chronic hypertrophic pulpitis*
- B. *Chronic granulating pulpitis*
- C. *Chronic papillitis*
- D. *Gingival polyp*
- E. *Chronic simple pulpitis*

**18.** A 5-year-old child complains about spontaneous pain in an upper jaw tooth on the right that is getting worse at night and during eating cold food. Objectively: the 65 tooth has a deep cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-standing pain. What is your provisional diagnosis?

- A. Exacerbation of chronic pulpitis*
- B. Acute periodontitis*
- C. Exacerbation of chronic periodontitis*
- D. Acute serous pulpitis*
- E. Acute purulent pulpitis*

**19.** A 14-year-old child complains about acute spontaneous spasmodic pain in an upper jaw tooth on the right. The pain has been lasting for 3 days, it is throbbing, irradiating to the temple, getting worse at night. Objectively: surface of the 15 tooth exhibits a carious cavity within parapulpal dentine. Dentine is softened, of greyish colour. Probing of the whole cavity floor is painful, percussion of the 15 tooth is painless. What is the most likely diagnosis?

- A. Acute purulent pulpitis*
- B. Acute diffuse pulpitis*
- C. Acute focal pulpitis*
- D. Acute periodontitis*
- E. Exacerbation of chronic periodontitis*

**20.** A 12-year-old boy complains about permanent intense throbbing toothache that is getting worse when biting down on food. Objectively: the patient's face is asymmetric because of a collateral edema of soft tissues, submandibular lymph nodes are enlarged and painful on palpation. The 26 tooth has a deep cavity not communicating with the tooth cavity. Thermal test is positive, probing is painless, percussion causes acute pain, the tooth is mobile. X-ray picture of the 26 tooth shows no changes in the periodontium. What is the most likely diagnosis?

- A. Acute purulent periodontitis*
- B. Acute serous periodontitis*
- C. Exacerbation of chronic periodontitis*
- D. Acute purulent pulpitis*
- E. Pulpitis complicated by periodontitis*

**21.** A 6-year-old girl was brought to the dentist for completing the treatment of the 75 tooth for chronic granulating periodontitis. The patient has no complaints. Objectively: occlusive dressing on the 75 tooth remains intact, percussion is painless, mucous membrane in the region of the 75 tooth exhibits no pathological changes, is painless on palpation. What material is the most appropriate for the root canal filling in this case?

- A. Zinc oxide eugenol paste*
- B. Sealer with gutta-percha point*
- C. Calcium-containing paste*
- D. Glass ionomer cement*
- E. Iodoform paste*



**22.** An 8-year-old boy was diagnosed with chronic fibrous pulpitis of the 21 tooth. It was treated by extirpation method. Choose the material for root filling:

- A. *Calcium-containing material*
- B. *Glass-ionomer cement*
- C. *Zinc oxide eugenol paste*
- D. *Resorcin-formalin paste*
- E. *Phosphate cement*

**23.** Parents of an 8-year-old child complain about a painful formation in the child's oral cavity that obstructs food intake. The same complaints were registered two years ago. Mucous membrane of lateral tongue surface is hyperemic and edematous. There is an oval erosion over 0,7 cm large covered with yellow greyish deposit. Erosion edges are hyperemic and painful on palpation. The child has a history of chronic cholecystocholangitis. What is the most likely diagnosis?

- A. *Chronic recurrent aphthous stomatitis*
- B. *Erythema multiforme*
- C. *Behcet's syndrome*
- D. *Stevens-Johnson syndrome*
- E. *Traumatic erosion*

**24.** A 12-year-old child complains about bleeding and pain in the 46 tooth during eating. He has a history of acute pain some time before. Objectively: there is a deep carious cavity (Black's class II) communicating with the dental cavity, partially filled with overgrown pulp. Pulp tissue is bleeding, painful on touch. There is soft white dental deposit. What is the most likely diagnosis?

- A. *Chronic hypertrophic pulpitis*
- B. *Chronic papillitis*
- C. *Chronic simple pulpitis*
- D. *Chronic gangrenous pulpitis*
- E. *Chronic granulating periodontitis*

**25.** Examination of a 6-year-old girl revealed a deep carious cavity in the 85 tooth. Percussion and probing are painless. After removal of the softened dentine, communication with the tooth cavity showed up. Deep probing is painless. X-ray picture of the 85 tooth shows the focus of destruction of bone tissue in the region of bifurcation; cortical plate of the 35 has no pathological changes. It is most expedient to use the following material for the root filling:

- A. *Zinc oxide eugenol cement*
- B. *Resorcin-formalin paste*
- C. *Glass-ionomer cement*
- D. *Phosphate cement*
- E. *Calcium-containing paste*

**26.** A 8-year-old child has a deep carious cavity communicating with dental cavity on the distal-approximal masticatory surface of the 75 tooth. Probing causes pain. Percussion is painless. Cold water causes slowly abating pain. The tooth decayed some months ago and wasn't treated. What treatment method is efficient in this case?

- A. *Devital amputation*
- B. *Biological method*
- C. *Vital extirpation*
- D. *Vital amputation*
- E. *Devital extirpation*

**27.** A 9-year-old child complains about Silica-alumina cement dull pain that is getting worse while pressing the tooth. The tooth was treated for pulpitis one month ago. Objectively: the 36 tooth is filled. Percussion causes acute pain. Mucous membrane is hyperemic and edematous. What is the most likely diagnosis?

- A. *Acute serous periodontitis*
- B. *Exacerbation of chronic pulpitis*
- C. *Acute diffuse pulpitis*
- D. *Acute suppurative pulpitis*
- E. *Exacerbation of chronic periodontitis*

**28.** A 5-year-old child complains about spontaneous pain in an upper jaw tooth on the right that is getting worse at night and during eating cold food. Objectively: the 65 tooth has a deep cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-standing pain. What is your provisional diagnosis?

- A. *Exacerbation of chronic pulpitis*
- B. *Acute periodontitis*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute serous pulpitis*
- E. *Acute purulent pulpitis*

**29.** A 13-year-old boy complains about pain in the upper jaw caused by warm and hot stimuli, offensive breath when he sucks his tooth. Objectively: the 24 tooth is changed in color, there is a deep carious cavity communicating with the tooth cavity. Deep probing is painful. Percussion causes no pain. What is the most likely diagnosis?

- A. *Chronic gangrenous pulpitis*
- B. *Chronic periodontitis*
- C. *Chronic fibrous pulpitis*
- D. *Exacerbation of chronic pulpitis*
- E. *Exacerbation of chronic periodontitis*

**30.** An 8,5-year-old child is apparently healthy. The child complains about pain in an upper tooth on the left caused by traumatic injury sustained three hours ago. Objectively: the crown part of the 21 tooth is destroyed by 1/2, the pulp is red and significantly exposed, probing causes acute pain and bleeding. Percussion of the 21 tooth is extremely painful. Choose the most efficient treatment method of the 21 tooth:

- A. *Vital amputation*
- B. *Vital extirpation*
- C. *Devital amputation*
- D. *Devital extirpation*
- E. *Bioassay technique*

**31.** The pain has been lasting for 3 days, it is throbbing, irradiating to the temple, getting worse at night. Objectively: surface of the 15 tooth exhibits a carious cavity within parapulpal dentine. Dentine is softened, of greyish colour. Probing of the whole cavity floor is painful, percussion of the 15 tooth is painless. What is the most likely diagnosis?

- A. *Acute purulent pulpitis*
- B. *Acute diffuse pulpitis*
- C. *Acute focal pulpitis*
- D. *Acute periodontitis*
- E. *Exacerbation of chronic periodontitis*

**32.** An 8-year-old boy was diagnosed with chronic fibrous pulpitis of the 21 tooth. It was treated by extirpation method. Choose the material for root filling:

- A. *Calcium-containing material*
- B. *Glass-ionomer cement*
- C. *Zinc oxide eugenol paste*
- D. *Resorcin-formalin paste*
- E. *Phosphate cement*

**33.** A 14-year-old child complains of bleeding and pain during eating in the lower right molar. Objectively: the medial contact and masticatory surfaces of the 46 tooth exhibit a large carious cavity filled with red tissue. Superficial probing causes pain and moderate bleeding. Deeper probing causes acute pain. Percussion is painless. What is your provisional diagnosis:

- A. *Chronic hypertrophic pulpitis*
- B. *Chronic fibrous pulpitis*
- C. *Chronic gangrenous pulpitis*
- D. *Chronic papillitis*
- E. *Chronic granulating periodontitis*

**34.** Examination of a 5-year-old child Stevens-Johnson syndrome revealed a carious cavity communicating with the tooth cavity on the lingual surface of the 54 tooth. Halitosis is present. Superficial probing of the cavity is painless, deeper probing causes pain reaction. Percussion is painless. Interviewing revealed that hot food caused pain. Select the medication for antiseptic treatment of root canals:

- A. *Sodium hypochlorite*
- B. *Aethonium solution*
- C. *Furacilin solution*
- D. *Alcohol*
- E. *Formalin solution*

**35.** X-ray examination of the 46 tooth in a 7-year-old child reveals the following: the root walls are parallel, their thickness gradually decreases, they have pointed ends. The root canal converges towards the tooth cavity, and diverges at the developing apical hole. Periodontal gap is of the same width along the entire length of the root. At the root apex it merges with the growth zone. Specify the stage of root development:

- A. *Continuing root apex development*
- B. *Continuing root development*
- C. *Open apex*
- D. *Continuing periodontium development*
- E. *Complete root and periodontium development*

**36.** A 5-year-old child complains about spontaneous pain in an upper jaw tooth on the right that is getting worse at night and during eating cold food. Objectively: the 65 tooth has a deep cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-standing pain. What is your provisional diagnosis?

- A. *Exacerbation of chronic pulpitis*
- B. *Acute periodontitis*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute serous pulpitis*
- E. *Acute purulent pulpitis*

**37.** An 8,5-year-old child is apparently healthy. The child complains about pain in an upper tooth on the left caused by traumatic injury sustained three hours ago. Objectively: the crown part of the 21 tooth is destroyed by 1/2, the pulp is red and significantly exposed, probing causes acute pain and bleeding. Percussion of the 21 tooth is extremely painful. Choose the most efficient treatment method of the 21 tooth:

- A. *Vital amputation*      C. *Devital amputation*      E. *Bioassay technique*  
 B. *Vital extirpation*      D. *Devital extirpation*

**38.** A 14-year-old child complains about acute spontaneous spasmodic pain in an upper jaw tooth on the right. The pain has been lasting for 3 days, it is throbbing, irradiating to the temple, getting worse at night. Objectively: surface of the 15 tooth exhibits a carious cavity within parapulpal dentine. Dentine is softened, of greyish colour. Probing of the whole cavity floor is painful, percussion of the 15 tooth is painless. What is the most likely diagnosis?

- A. *Acute purulent pulpitis*      D. *Acute periodontitis*  
 B. *Acute diffuse pulpitis*      E. *Exacerbation of chronic periodontitis*  
 C. *Acute focal pulpitis*

**39.** A 12-year-old boy complains of severe pain caused by cold food in the 11 tooth. A day before he had a crown break off of the 11 tooth. Examination revealed an oblique fracture of the 11 tooth crown with the opening of the tooth cavity, probing causes acute pain, comparative percussion is painful, there is minor tooth mobility. What treatment should be administered?

- A. *Vital extirpation*      C. *Biologic method*      E. *Devital amputation*  
 B. *Devital extirpation*      D. *Vital amputation*

**40.** A 12-year-old boy repeatedly visits a dentist to finish treatment of the 36 tooth for the exacerbation of chronic periodontitis. The complaints are absent. Objectively: occlusive dressing on the 36 tooth is preserved, tooth percussion is painless, mucous membrane of the 36 has no pathological changes, is painless on palpation. What material should be used for root canal filling in this case?

- A. *Sealer with a gutta-percha point*      D. *Calcium-containing paste*  
 B. *Zinc-eugenol paste*      E. *Phosphate cement*  
 C. *Resorcinol-formalin paste*

**41.** An 8-year-old boy complains of having toothache during eating. Objectively: approximal surface of the 55 tooth has a deep carious cavity communicating with the tooth cavity. Probing causes acute pain, there is bleeding, percussion is painless. What is the most likely diagnosis?

- A. *Chronic fibrous pulpitis*      D. *Chronic granulating periodontitis*  
 B. *Chronic hypertrophic pulpitis*      E. *Chronic fibrous periodontitis*  
 C. *Chronic gangrenous pulpitis*

**42.** A 4-year-old girl complains of spontaneous acute toothache in the upper jaw on the right increasing during eating. The pain arose two days ago. Objectively: there is a deep carious cavity filled with softened dentin in the 55 tooth. There is no intercommunication with the tooth cavity. Probing of the cavity floor is slightly painful. Percussion is painful. What is the presumptive diagnosis?

- A. *Acute pulpitis complicated by periodontitis*
- B. *Acute purulent pulpitis*
- C. *Acute generalized (serous) pulpitis*
- D. *Exacerbation of chronic gangrenous pulpitis*
- E. *Acute purulent periodontitis*

**43.** A 5-year-old boy complains of a carious cavity, periodic toothache, gum swelling. Objectively: masticatory surface of the 74 tooth has a deep cavity not communicating with the tooth cavity, cold stimuli, probing and percussion are painless, mucous membrane is pale pink, there is a caicatrix from a fistula. X-ray picture shows an ill-defined focus of bone tissue destruction in the region of the roots bifurcation. What is the most likely diagnosis?

- A. *Chronic granulating periodontitis*
- B. *Exacerbation of chronic fibrous peri-odontitis*
- C. *Chronic fibrous periodontitis*
- D. *Exacerbation of chronic granulating periodontitis*
- E. *Chronic granulomatous periodontitis*

**44.** A 13-year-old girl complains of toothache increasing while biting. Objectively: the 36 tooth has a deep carious cavity not communicating with the tooth cavity, the response to thermal stimuli is painless, percussion is sharply painful, mucous membrane is intact. X-ray picture shows no changes. What is the most likely diagnosis?

- A. *Acute serous periodontitis*
- B. *Acute purulent periodontitis*
- C. *Acute serous pulpitis*
- D. *Acute purulent pulpitis*
- E. *Exacerbation of chronic periodontitis*

**45.** An 8-year-old child has a deep carious cavity communicating with tooth cavity on the distal-approximal masticatory surface of the 75 tooth. Probing causes pain. Percussion is painless. Cold water causes slowly abating pain. The tooth decayed several months ago and wasn't treated. What treatment method would be efficient in th's case?

- A. *Devital amputation*
- B. *Biological method*
- C. *Vital extirpation*
- D. *Vital amputation*
- E. *Devital extirpation*

**46.** An 8-year-old child complains about pain in the 21 tooth that is getting worse during biting down. A month ago a part of tooth crown broke off as a result of a fall. The child didn't consult a dentist. Objectively: in the region of medial'angle of the 21 tooth there is a crown defect that makes up 1/3 of

the crown's height. Tooth cavity is open, probing and thermal stimulus cause no pain. Percussion is acutely painful. Gum around the 21 tooth is edematous and hyperaemic. What is the provisional diagnosis?

- A. *Acute condition of chronic periodontitis*
- B. *Acute condition of chronic pulpitis*
- C. *Acute serous periodontitis*
- D. *Acute purulent periodontitis*
- E. *Pulpitis complicated by periodontitis*

47. A 5-year-old child complains of spontaneous pain in an upper jaw tooth on the right that is getting worse at night and during eating cold food. Objectively: the 65 tooth has a deep cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-standing pain. What is your provisional diagnosis?

- A. *Exacerbation of chronic pulpitis*
- B. *Acute periodontitis*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute serous pulpitis*
- E. *Acute purulent pulpitis*

48. An 8,5-year-old child is apparently healthy. The child complains of pain in an upper tooth on the left caused by a traumatic injury sustained three hours ago. Objectively: the crown part of the 21 tooth is destroyed by 1/2, the pulp is red and significantly exposed, probing causes acute pain and bleeding. Percussion of the 21 tooth is extremely painful. Choose the most efficient treatment method of the 21 tooth:

- A. *Vital amputation*
- B. *Vital extirpation*
- C. *Devital amputation*
- D. *Devital extirpation*
- E. *Bioassay technique*

49. A 14-year-old child complains about acute spontaneous pain in an upper jaw tooth on the right. The pain has been lasting for 3 days, it is throbbing, irradiating to the temple, getting worse at night. Objectively: surface of the 15 tooth exhibits a carious cavity within parapulpal dentine. Dentine is softened, of greyish colour. Probing of the whole cavity floor is painful, percussion of the 15 tooth is painless. What is the most likely diagnosis?

- A. *Acute purulent pulpitis*
- B. *Acute diffuse pulpitis*
- C. *Acute focal pulpitis*
- D. *Acute periodontitis*
- E. *Exacerbation of chronic periodontitis*

50. After examination a 5-year-old child was diagnosed with acute total pulpitis of the 74 tooth. What treatment will be most efficient in this case?

- A. *Pulp extirpation*
- B. *Vital amputation*
- C. *Non-vital amputation*
- D. *Biological method*
- E. *Tooth extraction*

51. Parents of a 3-year-old child report that the child has constant pain in the upper front teeth. Objectively: the coronal part of the 61 tooth is gray and decayed. Probing of the root canal orifice is painful and accompanied by bleeding. The tooth percussion provokes acute pain. Mucosa is hyperemic,

edematic and painful. Palpation in the region of the 61, 62 teeth reveals a fistula. What is your provisional diagnosis?

- A. *Exacerbation of chronic periodontitis*
- B. *Acute purulent periodontitis*
- C. *Acute diffuse pulpitis*
- D. *Chronic granulating periodontitis*
- E. *Exacerbation of chronic pulpitis*

**52.** A 5-year-old child complains of acute spontaneous pain in an upper jaw tooth on the right. Hot stimuli make the pain significantly worse. The tooth had been previously treated for median caries. The pain arose a day before. On the medial occlusal surface of the 54 tooth there is a deep carious cavity, the tooth cavity is closed. Probing of the cavity floor is painless, percussion is slightly painful. After necrotomy the pulp horn was opened. Deep probing is painful. What is the provisional diagnosis?

- A. *Acute purulent pulpitis*
- B. *Acute serous pulpitis*
- C. *Exacerbation of chronic pulpitis*
- D. *Acute purulent periodontitis*
- E. *Exacerbation of chronic periodontitis*

**53.** A 6-year-old patient complains of a long-lasting pain in a lower right tooth that is getting worse when biting down on food. The tooth has been previously treated for caries. Objectively: the cavity on the occlusal surface of the 36 tooth is filled, percussion is painful. Along the mucogingival fold in the projection of the 36 tooth roots there is a fistula with purulent discharge. What is the most likely diagnosis?

- A. *Chronic granulating periodontitis*
- B. *Exacerbation of chronic periodontitis*
- C. *Chronic fibrous periodontitis*
- D. *Chronic granulomatous periodontitis*
- E. *Radicular cyst of mandible*

**54.** During the dental care procedures a 4-year-old child has been found to have a carious cavity in the 64 tooth. The cavity filled with softened dentin is located within parapulpal dentin and doesn't communicate with the tooth cavity. Probing of the cavity floor is painless. Gingival mucosa in the projection of the root apices of the 64 tooth exhibits a healed fistula. What is the most likely diagnosis?

- A. *Chronic granulating periodontitis*
- B. *Chronic periodontitis fibrotic*
- C. *Chronic fibrous pulpitis*
- D. *Chronic gangrenous pulpitis*
- E. *Chronic periodontitis granulomatous*

**55.** An 8-year-old child has been clinically diagnosed with exacerbation of chronic periodontitis of the 84 tooth. The crown is decayed by 1/2. What is the dentist's optimal tactics?

- A. *Extraction*
- B. *Endodontic treatment*
- C. *Endodontic treatment and drug therapy*
- D. *Drug therapy*
- E. *Opening along the mucogingival fold, drug therapy*

**56.** A 21-year-old patient complains of blood that oozes from a cavity in an upper jaw tooth during eating. Objectively: the approximal occlusal surface of the 27 tooth has a deep carious cavity filled with soft tissue overgrowth of purple-red colour that bleeds easily when touched by the probe. Probing causes a slight pain. There is a slight pain reaction to cold stimuli. EPT result is 60 mA. Ro-gram shows no pathological changes. What is the most likely diagnosis?

- A. *Chronic hypertrophic pulpitis*
- B. *Hypertrophic papillitis*
- C. *Chronic granulating periodontitis*
- D. *Chronic fibrous periodontitis*
- E. *Chronic gangrenous pulpitis*

**57.** A 5-year-old child complains of spontaneous pain in an upper jaw tooth on the right that is getting worse at night and during eating cold food. Objectively: the 65 tooth has a deep carious cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-lasting pain. What is your provisional diagnosis?

- A. *Exacerbation of chronic pulpitis*
- B. *Acute periodontitis*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute serous pulpitis*
- E. *Acute purulent pulpitis*

**58.** An 8,5-year-old girl complains of pain in the lower right molar during eating. Objectively: the occlusal surface of the 85 tooth exhibits a carious cavity filled with softened dentin. The cavity is located within circumpulpal dentin and communicates with the tooth cavity. Probing causes acute pain, moderate bleeding. Percussion is painless. What is the optimal treatment?

- A. *Non-vital amputation*
- B. *Non-vital extirpation*
- C. *Vital extirpation*
- D. *Vital amputation*
- E. *Biological method*

**59.** A 14-year-old patient complains of intense, throbbing pain in the region of the 46 tooth which appeared for the first time two days ago. Objectively: the 46 tooth is filled. Percussion causes acute pain, the tooth is mobile, the mucous membrane around the 46 tooth is hyperemic and edematous, palpation of the mucogingival fold in the root apex projection is painful. Ro-gram shows no changes in the periapical region of the 46 tooth. What is the most likely diagnosis?

- A. *Acute purulent periodontitis*
- B. *Acute localized periodontitis*
- C. *Acute purulent pulpitis*
- D. *Acute serous periodontitis*
- E. *Exacerbation of chronic periodontitis*



**60.** After examination a 5-year-old child was diagnosed with acute general pulpitis of the 74 tooth. What treatment will be most efficient in this case?

- A. *Pulp extirpation*                      C. *Non-vital amputation*    E. *Tooth extraction*
- B. *Vital amputation*                      D. *Biological method*

**61.** A 5-year-old child has been diagnosed with chronic granulating periodontitis of the 85 tooth. What is the optimal material for the root canal filling?

- A. *Zinc -eugenol cement*                      D. *Calcium-containing paste*
- B. *Zinc-phosphate cement*                      E. *Resorcinol-formalin paste*
- C. *Glass ionomer cement*

**62.** Parents of a 3-year-old child report that the child has persistent pain in the front maxillary teeth. Objectively: the coronal part of the 61 tooth is gray and decayed. Probing of the root canal orifice causes pain response and is accompanied by bleeding. The tooth percussion provokes acute pain. Mucosa is hyperemic, edematous and tender. Palpation in the region of the 61, 62 teeth reveals a fistula. What is your provisional diagnosis?

- A. *Exacerbation of chronic periodontitis*
- B. *Acute purulent periodontitis*
- C. *Acute diffuse pulpitis*
- D. *Chronic granulating periodontitis*
- E. *Exacerbation of chronic pulpitis*

**63.** A 7,5-year-old boy fell down on his face and damaged his front maxillary teeth. Objectively: the crowns of the 11 and 12 teeth are destroyed by 1/4. The tooth cavity is closed. Probing causes pain along  $\frac{1}{4}$  break-off line, percussion of the 11 and 12 teeth causes no pain response. Mucosa around the 11 and 12 teeth is slightly hyperemic. Radiograph of the 11 and 12 teeth shows the intactness of the dental tissues and alveolar process. What tactics of a dentist would be optimal in the first hours after the injury?

- A. *Pulp monitoring*                      D. *Parapulpal pin reconstruction*
- B. *Fabrication of an artificial crown*    E. *Composite filling*
- C. *Photopolymer filling*

**64.** A 9-year-old child complains of pain in the left mandibular molar that occurs during eating. The masticatory surface of the 75 tooth exhibits a carious cavity filled with softened dentin and localized within parapulpal dentin. The cavity communicates with the tooth cavity. Probing at the site of communication causes acute pain and moderate bleeding. Percussion of the tooth causes no pain response. Radiography revealed no periodontal alterations in the 75 tooth. Select the method of treatment:

- A. *Devital amputation*                      D. *Vital amputation*
- B. *Devital extirpation*                      E. *Biological method*
- C. *Vital extirpation*

**65.** A 12-year-old girl visited a dentist for a regular check-up. Objectively: the teeth are intact, the bite is open, the mucosa in the papillary and marginal regions is hyperemic and cyanotic, the gingival papillae are roundish, enlarged and cover one third of the crown height of the anterior maxillary teeth. Make a provisional diagnosis:

- A. Hypertrophic gingivitis  
B. Chronic catarrhal gingivitis  
C. Acute catarrhal gingivitis  
D. Gingival fibromatosis

**66.** 10-year-old child was undergoing complex dental care. During the procedures, a deep carious cavity communicating with the tooth cavity was revealed in the 36 tooth. The tooth was not sensitive either to probing, percussion, or temperature stimuli. The patient was diagnosed with chronic periodontitis. During the treatment, the accidental perforation of the tooth cavity floor occurred. What measures should be taken in this case?

- Sealing the perforation with glass ionomer
- Potassium iodide electrophoresis
- Application of zinc-eugenol paste
- Sealing the perforation with calcium hydroxide
- Tooth extraction

**65.** A 14-year-old patient complains of moderate non-irradiating pain in the region of the 37 tooth. Objectively: the 37 tooth exhibits a deep carious cavity communicating with the pulp chamber. Probing and thermal stimulation cause no pain response, vertical percussion is positive. Radiograph shows no pathological alterations. What is the most likely diagnosis?

- A. Acute serous periodontitis  
B. Acute serous periostitis  
C. Acute suppurative pulpitis  
D. Acute suppurative periodontitis  
E. Exacerbation of chronic periodontitis

**66.** Radiography of the 46 tooth in a 7-year-old child revealed parallel root walls with a gradual decrease of their thickness resulting in pointed ends. There is a root canal narrowing in the region that is adjacent to the tooth cavity, and a widening at the nascent apical aperture. Periodontal ligament space has a uniform width over the entire root length. In the periapical region it merges with the growth zone. Specify the stage of the root development:

- A. Open apex  
B. Incomplete root growth  
C. Complete root and periodont development  
D. Incomplete periodont development

**67.** A 5-year-old child complains of spontaneous pain in a maxillary tooth on the right. The pain gets worse at night and during eating cold food. Objectively: the 65 tooth has a deep carious cavity communicating with the tooth cavity. Probing causes pain response, the tooth is not sensitive to percussion. Cold water causes long-lasting pain. Make a provisional diagnosis:

- A. Exacerbation of chronic pulpitis  
B. Acute periodontitis  
C. Exacerbation of chronic periodontitis  
D. Acute serous pulpitis  
E. Acute purulent pulpitis

**68.** A 4-year-old child complains of acute spontaneous pain in a mandibular tooth on the right. The pain is aggravated by cold stimuli. Objectively: the 84 tooth exhibits a deep carious cavity that does not communicate with the tooth cavity. Probing causes pain response all over the cavity floor, percussion causes pain. The mucosa in the region of the 84 tooth is hyperemic, edematous. Regional lymph nodes are enlarged. What is the most likely diagnosis?

A. *Acute pulpitis complicated by periodontitis*

B. *Acute serous pulpitis*

C. *Acute serous periodontitis*

D. *Exacerbation of chronic periodontitis*

E. *Acute suppurative pulpitis*

**69.** After examination a 5-year-old child was diagnosed with acute general pulpitis of the 74 tooth. What treatment will be most efficient in this case?

A. *Pulp extirpation*

D. *Biological method*

B. *Vital amputation*

E. *Tooth extraction*

C. *Non-vital amputation*

**70.** A 12-year-old boy complains of a cavity in a tooth on the lower left jaw. Objectively: 1/3 of the 36th tooth is destroyed, the carious cavity opens into the dental cavity; there is sensitivity to cold stimulus; probing and percussion are painless. X-ray imaging shows the periodontal fissure of the 36th tooth roots to be widened. What is the provisional diagnosis?

A. *Chronic fibrous periodontitis*

D. *Chronic granulating periodontitis*

B. *Chronic simple pulpitis*

E. *Chronic granulomatous periodontitis*

C. *Chronic gangrenous pulpitis*

**71.** A 10-year-old child has fallen and hit stairs with his teeth. An appointment with a dentist was made only 2 days later. There are complaints of cold stimulus causing sharp pain. Objectively: the 11th tooth has transversal defect at 2/3 of the crown, the pulp is significantly exposed. Probing causes sharp pain. Percussion is painful, the tooth is mobile. The gums are slightly hyperemic. What method of treatment should be used in this case?

A. *Vital extirpation*

D. *Vital amputation*

B. *Non-vital extirpation*

E. *Non-vital amputation*

C. *Biological method*

**72.** A 15-year-old adolescent complains of a two-day long sharp pulsing pain in the tooth, which intensifies when biting or touching the tooth with the tongue. Objectively: the 26th tooth contains composite material filling. Vertical and horizontal percussion of the tooth are painful, the tooth oscillates easily mobile in vestibular-oral projection. Gingival mucosa of the affected area is hyperemic, swollen, sharply painful when palpated. X-ray imaging shows no changes. What is the most probable diagnosis?

A. *Acute purulent periodontitis*

D. *Acute serous pulpitis*

B. *Acute purulent pulpitis*

E. *Exacerbation of chronic periodontitis*

C. *Acute serous periodontitis*

73. A 5-year-old child has a cavity localised in the deep dentin on the masticatory surface of onslis u tooth. The cavity is filled with softened pigmented den<sup>ti</sup>n and food remains. The child complains of dull pain when taking food or cold liquids. Probing of the cavity floor is slightly painful; when the dentin is removed with excavator, pink pulp is visible through the cavity floor. What is the most probable diagnosis?

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| A. <i>Chronic fibrous pulpitis</i> | D. <i>Acute diffuse pulpitis</i>      |
| B. <i>Chronic deep caries</i>      | E. <i>Chronic gangrenous pulpitis</i> |
| C. <i>Acute deep caries</i>        |                                       |

74. A 9-year-old child complains of dull pain in a tooth, which increases when the tooth is pressed. One month ago the tooth was treated for pulpitis. Objectively: the 36th tooth is filled; percussion is sharply painful; mucosa<sup>is</sup> hyperemic, swollen. X-ray imaging does not show any changes. What is the most probable diagnosis?

- A. *Acute serous periodontitis*
- B. *Exacerbation of chronic pulpitis*
- C. *Acute diffuse pulpitis*
- D. *Acute suppurative pulpitis*
- E. *Exacerbation of chronic periodontitis*

#### 4. Parodontal diseases and diseases of oral mucosa

1. An 11 year old girl complains about gingival haemorrhage during tooth brushing and eating. She has been suffering from this for a year. Gum of both upper and lower jaws is edematic and congestively hyperemic. Hygienic state of oral cavity is unsatisfactory. Bite is edge- to-edge. Roentgenological examination of periodontium revealed no pathological changes. What is the provisional diagnosis?

- |  |                                   |
|--|-----------------------------------|
| A. <i>Chronic catarrhal gingivitis</i> | D. <i>Localized periodontitis</i> |
| B. <i>Acute catarrhal gingivitis</i>   | E. <i>Hypertrophic gingivitis</i> |
| C. <i>Generalized periodontitis</i>    |                                   |

2. An 11 year old patient complains about tooth mobility and gingival haemorrhage. He has been suffering since he was 3 years old. Objectively: gums around all the teeth are hyperemic, edematic, bleed during instrumentl examination. Tooth roots are dehiscd by 1/3 and covered with white deposit. There is 2 degree tooth mobility. Dentogingival pockets are 4–5 mm deep. External examination revealed dryness and thickening of palms, anterior third of forearms, sole surfaces; there are scratches. What is the most probable provisional diagnosis?

- |                                     |  |
|-------------------------------------|--|
| A. <i>Papillon-Lefevre syndrome</i> | D. <i>Hand-Schueller-Christian disease</i> |
| B. <i>Gaucher's disease</i>         | E. <i>Niemann-Pick disease</i>             |
| C. <i>Letterer-Siwe disease</i>     |  |

3. A 13,5 year old girl complains of gingival onuls and haemorrhage during tooth brushing and eating, halitosis. She has been ill with angina for a week. Objectively: mucous membrane of gums in the area of frontal teeth of her upper and lower jaws is edematic, hyperemic. Apices of gingival papillae are necrotic, they also bleed when touched. There is a thick layer of soft tooth plaque. What is the causative agent of this disease?

- A. *Anaerobic microflora*    C. *Streptococci*    E. *Yeast fungi*  
 B. *Herpes virus*    D. *Staphylococci*

4. A 12-year-old patient complains about gingival haemorrhage and tooth mobility. He has been suffering from this since the age of 4. Objectively: gums around all the teeth are hyperemic and edematic, bleed during instrumental examination. Tooth roots are exposed by 1/3 and covered with whitish deposit. II degree tooth mobility is present. Dentogingival pouches are 4–5 mm deep. External examination revealed dryness and thickening of superficial skin layer on the hands and feet, there are also some cracks. What is the most likely diagnosis?

- A. *Papillon-Lefevre syndrome*    D. *Letterer-Siwe disease*  
 B. *Hand-Schuller-Christian disease*    E. *Localized periodontitis*  
 C. *Generalized periodontitis*

5. A 13-year-old patient complains about gingival haemorrhage during tooth brushing. Objectively: gums around all the teeth are hyperemic and edematic, PMA index (papillary marginal alveolar index) is 46 %, Greene-Vermillion hygiene index is 2,5. Provisional diagnosis: exacerbation of chronic generalized catarrhal gingivitis. This patient should be recommended to use a toothpaste with the following active component:

- A. *Chlorhexidine*    D. *Vitamins A, D, E*  
 B. *Calcium glycerophosphate*    E. *Microelement complex*  
 C. *Monofluorophosphate*

6. A 16-year-old teenager complains about halitosis, general weakness, body temperature rise up to 37,6 °C. These symptoms turned up 2 days ago, the boy has a history of recent angina. Objectively: oral cavity hygiene is unsatisfactory, teeth are covered with soft white deposit. Gums are hyperaemic, gingival papillae are covered with greyish coating. What is the most likely diagnosis?

- A. *Ulceronecrotic gingivitis*    D. *Chronic catarrhal gingivitis*  
 B. *Acute catarrhal gingivitis*    E. *Desquamative gingivitis*  
 C. *Hypertrophic gingivitis*

7. After preventive examination a 10-year-old child was diagnosed with osteoporosis circumscripta of the 13, 12, 11, 21, 22, 23 teeth. The patient was administered electrophoresis with remineralizing solutions. What preparations and in what order are to be applied in this case?

- A. *Calcium and phosphorus preparations with the following application of fluorine on the teeth*

*B. Fluorine preparations with the following application of calcium and phosphorus preparations*

*C. Calcium preparations only*

*D. Phosphorus preparations only*

*E. Fluorine preparations only*

**8.** A 13-year-old patient complains about gingival haemorrhage during tooth brushing. Objectively: gums around all the teeth are hyperemic and edematic, PMA index (papillary marginal alveolar index) is 46 %, Greene-Vermillion hygiene index is 2,5. Provisional diagnosis: exacerbation of chronic generalized catarrhal gingivitis. This patient should be recommended to use a toothpaste with the following active component:

*A. Chlorhexidine*

*D. Vitamins A, D, E*

*B. Calcium glycerophosphate*

*E. Microelement complex*

*C. Monofluorophosphate*

**9.** A 16-year-old teenager complains about halitosis, general weakness, body temperature rise up to 37,6 °C. These symptoms turned up two days ago, the boy had a history of recent angina. Objectively: oral hygiene is unsatisfactory, the teeth are coated with soft dental deposit. Gums are hyperemic, gingival papillae are covered with greyish deposit. Specify the causative agent of this disease:

*A. Fusobacteria, spirochetes*

*D. Staphylococci*

*B. Streptococci*

*E. Yeast fungi*

*C. Herpes viruses*

**10.** A 13-year-old girl has been experiencing gingival hemorrhages and frontal teeth mobility throughout the last month. Objectively: gingival mucous membrane in the region of lower incisors and canines is edematic, hyperemic, it bleeds on touch. These teeth present with I degree mobility, parodontal pouches are 3 mm deep. Orthopantomogram shows reduction of bone tissue of interalveolar septa by 1/3 of their height. Frontal teeth of the lower jaw are overcrowded. Hygiene index is 4,2. What local treatment should be provided in the first place?

*A. Professional hygiene*

*D. Physical therapy*

*B. Anti-inflammatory therapy*

*E. Antibacterial therapy*

*C. Orthodontic care*

**11.** A 14-year-old teen complains of gingival haemorrhages during tooth brushing. Objectively: gingival mucosa is hyperemic, pastous, bleeds when touched. Schiller-Pisarev test is positive. PMA index – 70 %. Hygienic index – 3,0. X-ray picture of the frontal area depicts no evident changes. What is the most likely diagnosis?

*A. Chronic catarrhal gingivitis*

*D. Chronic hypertrophic gingivitis*

*B. Chronic periodontitis*

*E. Exacerbation of chronic periodontitis*

*C. Acute catarrhal gingivitis*

**12.** A 13-year-old girl has been experiencing gingival hemorrhages and frontal teeth mobility throughout the last month. Objectively: gingival mucous membrane in the region of lower incisors and canines is edematic, hyperemic, it bleeds on touch. These teeth present with I degree mobility, parodontal pouches are 3 mm deep. Orthopantomogram shows reduction of bone tissue of interalveolar septa by 1/3 of their height. Frontal teeth of the lower jaw are overcrowded. Hygiene index is 4,2. What local treatment should be provided in the first place?

- |                                     |                                 |
|-------------------------------------|---------------------------------|
| <i>A. Professional hygiene</i>      | <i>D. Physical therapy</i>      |
| <i>B. Anti-inflammatory therapy</i> | <i>E. Antibacterial therapy</i> |
| <i>C. Orthodontic care</i>          |                                 |

**13.** An 11-year-old girl complains about gingival haemorrhage during tooth brushing and eating. She has been suffering from this for a year. Gum of both upper and lower jaws is edematic and congestively hyperemic. Hygienic state of oral cavity is unsatisfactory. Bite is edge- to-edge. Roentgenological examination of periodontium revealed no pathological changes. What is the provisional diagnosis?

- |  |                                   |
|--|-----------------------------------|
| <i>A. Chronic catarrhal gingivitis</i> | <i>D. Localized periodontitis</i> |
| <i>B. Acute catarrhal gingivitis</i>   | <i>E. Hypertrophic gingivitis</i> |
| <i>C. Generalized periodontitis</i>    |                                   |

**14.** Examination of an 11-year-old boy revealed thickened, somewhat cyanotic, dense gingival margin overlapping the crowns of all teeth by 1/2 of their height. Fedorov-Volodkina oral hygiene index is 2,6½ MA index is 20 %. X-ray picture shows no pathological changes of peri- odontium. The child has a 2-year history of neuropsychiatric treatment for epilepsy. Make a provisional diagnosis:

- |   |                                      |
|---|--------------------------------------|
| <i>A. Chronic hypertrophic gingivitis</i> | <i>D. Acute catarrhal gingivitis</i> |
| <i>B. Chronic catarrhal gingivitis</i>    | <i>E. Generalized periodontitis</i>  |
| <i>C. Localized periodontitis</i>         |                                      |

**15.** A 10-year-old child complains of gingival pain and haemorrhage which appeared two days ago after a cold. Objectively: the gingiva is edematic, hyperaemic, bleeds easily, painful on palpation. The tips of gingival papillae are dome-shaped. What is the most likely diagnosis?

- |  |                                     |
|--|-------------------------------------|
| <i>A. Acute catarrhal gingivitis</i>   | <i>D. Ulcerative gingivitis</i>     |
| <i>B. Chronic catarrhal gingivitis</i> | <i>E. Generalized periodontitis</i> |
| <i>C. Hypertrophic gingivitis</i>      |                                     |

**16.** A 12-year-old patient complains of gingival haemorrhage, tooth mobility. He has has these presentations since the age of 4. Objectively: gingiva around all the teeth is hyperaemic, edematic, bleeds during instrumental examination. The teeth roots are exposed by 1/3 and covered with whitish plaque. The teeth are mobile. Dentogingival pockets are 4–5 mm deep. External examination revealed dryness and thickening of the outer layer of

skin on the palms, anterior third of the forearms, soles; there are skin cracks. What is the most likely diagnosis?

- A. *Papillon-Lefevre syndrome*
- B. *Hand-Schuller-Christian disease*
- C. *Niemann-Pick disease*
- D. *Letterer-Siwe disease*
- E. *Cyclic neutropenia*

**17.** A 12-year-old girl visited a dentist for a regular check-up. Objectively: the teeth are intact, the bite is open, the mucosa in the papillary and marginal regions is hyperemic and cyanotic, the gingival papillae are roundish, enlarged and cover one third of the crown height of the upper anterior teeth. Make a provisional diagnosis:

- A. *Hypertrophic gingivitis*
- B. *Chronic catarrhal gingivitis*
- C. *Acute catarrhal gingivitis*
- D. *Gingival fibromatosis*
- E. —

**18.** Preventive examination of a 13,5-year-old child revealed congestive hyperemia and a slight edema of the gingival margin in the region of the front teeth on both jaws. The patient has periodic gingival haemorrhages during tooth brushing. DMF index is 2. What kind of toothpaste should be recommended for the individual oral hygiene?

- A. *Toothpaste containing herbal extracts*
- B. *Toothpaste containing calcium*
- C. *Toothpaste containing aminofluorides*
- D. *Toothpaste containing sodium fluoride*
- E. *Toothpaste containing salt additives*

**19.** A 14-year-old child has been lately complaining about overgrowth and permanent bleeding of gums during tooth brushing. Objectively: gingival papillae in the anterior part of both jaws are swollen, hyperemic, overlap the tooth crowns by 1/3 of their height, bleed easily during the instrumental examination. Caries intensity is of average level. Hygiene of the oral cavity is not satisfactory. In this case it is advisable to recommend a toothpaste containing:

- A. *Aluminum compounds*
- B. *Zinc compounds*
- C. *Calcium compounds*
- D. *Fluorine compounds*
- E. *Pyrophosphate*

**20.** A 13-year-old girl complains of gingival haemorrhages during tooth brushing and eating solid food. Objectively: the gingival mucosa of the upper and lower jaws is somewhat edematous, hyperemic. The oral hygiene is inadequate. X-ray shows no changes. Make a diagnosis:

- A. *Chronic catarrhal gingivitis*
- B. *Acute catarrhal gingivitis*
- C. *Hypertrophic gingivitis*
- D. *Desquamative gingivitis*
- E. *Chronic atrophic gingivitis*



**21.** A 10-year-old girl complains of bleeding from the alveolar socket of the extracted 63 tooth lasting for three days. The patient has a history of prolonged bleeding after removal of primary teeth and frequent nosebleeds. Objectively: oral mucosa is pale, there are small hemorrhages. The socket of the extracted 63 tooth is filled with a big bulging clot with blood oozing from under it. Forearm skin has petechiae. What specialist should be visited in the first place?

A. *Hematologist*

B. *Neuropathist*

C. *Endocrinologist*

D. *Infectious diseases specialist*

E. *Gastroenterologist*

**22.** A 12-year-old patient has chronic catarrhal gingivitis. The oral vestibule is 7 mm deep. Fedorov-Volodkina hygiene index is 4. Examination revealed no abnormalities of lip frenulum attachment. What measures should be taken in the first place?

A. *Professional oral hygiene*

B. *Vestibuloplasty*

C. *Curettage of periodontal pockets*

D. *Physiotherapy*

E. –

**23.** A 12-year-old girl visited a dentist for a regular check-up. Objectively: the teeth are intact, the bite is open, the mucosa in the papillary and marginal regions is hyperemic and cyanotic, the gingival papillae are roundish, enlarged and cover one third of the crown height of the anterior maxillary teeth. Make a provisional diagnosis:

A. *Hypertrophic gingivitis*

B. *Chronic catarrhal gingivitis*

C. *Acute catarrhal gingivitis*

D. *Gingival fibromatosis*

**24.** A 13-year-old girl complains of experiencing pain, gum bleeding and bad breath for about six months. Objectively: in the region of the front mandibular teeth the gingival papillae and gingival margin are hypertrophied, edematous, cyanotic. There is a soft plaque in the cervical region. Hygiene index-3. The doctor administered a local anti-inflammatory therapy. Specify the further tactics of local treatment:

A. *Sclerotherapy*

B. *Gingival curettage*

C. *Gingivotomy*

D. *Physiotherapy*

E. *Vestibuloplasty*

**25.** A 9-year-old girl has had gingival hemorrhages, cracks in the mouth corners for a month. She has a history of frequent nosebleeds, rapid fatigability. Objectively: the facial skin and oral mucosa are pale. In the mouth corners there are cracks reaching the vermilion border. Gingiva in the region of the 11 and 12 teeth is hyperemic and edematous, bleeds when touched. DMF/dmf = 10. Back of the tongue is bright red, smooth, glossy. Submandibular lymph nodes are slightly enlarged, mobile, painless. What specialist is it necessary to consult with in the first place?

A. *Hematologist*

B. *Neuropathist*

C. *Endocrinologist*

D. *Infectious disease specialist*

E. *Gastroenterologist*

**26.** An 8-year-old girl complains of bleeding gums. The child suffers from pancreatic diabetes. Objectively: gingival papillas in the area of the upper and lower jaw teeth are hyperemic, swollen, cover 1/3 of the crown. What tests are necessary to determine severity of the illness?

- A. *X-ray radiography*
- B. *Reoparodontography (Impedance phlebography of periodontium)*
- C. *Capillary fragility test*
- D. *PMA index*
- E. *Stomatoscopy*

**27.** An 11-year-old child complains of pain and bleeding gums when eating, bad breath, weakness and headache that have been lasting for two days. Objectively: gingival mucosa in the area of front lower teeth is swollen, brightly hyperemic, easily bleeds when touched. Gingival papillas are covered with dirty-grey coating; when coating is removed the underlying surface is bleeding and painful. The occlusion is deep. There are significant deposits of soft dental plaque. The regional lymph nodes are slightly enlarged and painful when palpated. Body temperature is 37,6 °C. What is the provisional diagnosis?

- A. *Acute ulcerative gingivitis*
- B. *Acute catarrhal gingivitis*
- C. *Chronic catarrhal gingivitis*
- D. *Chronic hypertrophic gingivitis*
- E. *Generalized periodontitis*

**28.** A 3-year-old child suffers from extreme gingivitis with slight teeth mobility; teeth are intact. The skin is dry, the hair is brittle, the skin of the palms and soles of the feet is rough and covered in small cracks. What is the provisional diagnosis?

- A. *Papillon-Lefevre syndrome*
- B. *Niemann-Pick disease*
- C. *Hand-Schuller-Christian disease*
- D. *Eosinophilic granuloma (Taratynov's disease)*
- E. *Letterer-Siwe disease*

## 5. Diseases of oral mucosa

**1.** A 5 year old child has temperature rise up to 39,2 °C, sore throat, nausea. Objectively: mucous membrane of soft palate and palatine arches is brightly hyperemic, it can be distinctly distinguished among the surrounding tissues. The tongue is dry, edematic, bright-red, its lateral surfaces have no fur on them, fungiform papillae are evidently enlarged. Face skin is hyperemic apart of pale nasolabi- al trigone, is covered with spotty rash. Submaxillary lymph nodes are palpatory painful. What is the causative agent of this disease?

- A. *Hemolytic streptococcus*
- B. *Coxsackie virus*
- C. *Herpes virus*
- D. *Bordet-Gengou bacillus*
- E. *Loeffler's bacillus*

2. A 7 month o'd child was brought to a dentist because of an ulcer in the oral cavity. The child was born prematurely. She has been fed with breast milk substitutes by means of a bottle with rubber nipple. Objectively: on the border between hard and soft palate there is an oval ulcer 0,8×1,0 cm large covered with yellowish- grey deposit and surrounded with a rollylike infiltration. Make a provisional diagnosis:

- |                             |                                      |
|-----------------------------|--------------------------------------|
| <i>A. Bednar's aphtha</i>   | <i>D. Acute herpetic stomatitis</i>  |
| <i>B. Setton's aphtha</i>   | <i>E. Acute cand'dous stomatitis</i> |
| <i>C. Tuberculous ulcer</i> |                                      |

3. A 1,8 year old boy was under treatment in the infectious disease department. He was given ampicillin. On the 6th day of treatment there appeared white deposits in form of caseous film<sup>s</sup> that were revealed on the hyperemic mucous membrane in the area of gingival torus, cheeks and on the tongue. The films can be removed leaving hyperemic surface underneath them. General condition is satisfactory. Body temperature is 36,7 °C. What is the provisional diagnosis?

- |  |                                     |
|--|-------------------------------------|
| <i>A. Acute candidous stomatitis</i>   | <i>D. Acute herpetic stomatitis</i> |
| <i>B. Drug-induced stomatitis</i>      | <i>E. Mild case of leukoplakia</i>  |
| <i>C. Chronic candidous stomatitis</i> |                                     |

4. A 12 year old girl complains about burning and painfulness of her tongue, especially during eating spicy food. Objectively: there are oval red spots on the tip and dorsum of tongue. Filiform papillae are not present in the affected area. The girl mentions that the spots become periodically larger and have migratory nature. What is the most probable diagnosis?

- |  |                            |
|--|----------------------------|
| <i>A. Glossitis areata exfoliativa</i> | <i>D. Glossotrichia</i>    |
| <i>B. Median rhomboid glossitis</i>    | <i>E. Raspberry tongue</i> |
| <i>C. Lingua plicata</i>               |                            |

5. A 2 year old child was brought to a dentist to consult about rash and painfulness during eating that appeared yesterday. Objectively: body temperature is 37,5 °C, skin is clean, submaxillary lymph nodes are painful. Examination of oral cavity revealed on the mucous membrane of lips and tongue roundish painful erosions 1–3 mm in diameter covered with whitish deposit. The gum on both upper and lower jaws is hyperemic, edematic, bleed when touched. What is the most probable diagnosis?

- |   |   |
|---|---|
| <i>A. Acute herpetic stomatitis</i>     | <i>D. Multiform exudative erythema</i>  |
| <i>B. Stevens-Johnson syndrome</i>      | <i>E. Recurrent herpetic stomatitis</i> |
| <i>C. Recurrent aphthous stomatitis</i> |   |

6. Preventive examination of a 7-year- old schoolboy revealed unremovable grey-and-white layerings on the mucous membrane of cheek along the line of teeth joining. Mucous membrane is slightly hyperaemic, painless on

palpation. The boy is emotionally unbalanced, bites his cheeks. What is the most likely diagnosis?

- A. *Mild leukoplakia*
- B. *Chronic recurrent aphthous stomatitis*
- C. *Chronic candidous stomatitis*
- D. *Lichen ruber planus*
- E. *Multiform exudative erythema*

7. A 5-year-old boy presents with body temperature rise up to 39,2 °C, sore throat, headache, nausea. Objectively: mucous membrane of soft palate and palatine arches is evidently hyperemic, there is distinct border between it and surrounding tissues. The child's tongue is dry, edematous, its lateral surfaces are red and free of fur, fungiform papillae are evidently enlarged. Face skin is covered with spotty rash, hyperemic except for pale nasolabial triangle. Submandibular lymph nodes are painful on palpation. What is the causative agent of this disease?

- A. *Haemolytic streptococcus*
- B. *Coxsackie virus*
- C. *Herpes virus*
- D. *Bordet-Gengou bacillus*
- E. *Löffler's bacillus*

8. A 2-month-old child is anxious, sleeps badly, refuses food, has subfebrile body temperature. Objectively: hyperaemic mucous membrane of the child's tongue, lips, cheeks and palate has a caseous coating that can be easily removed with a tampon. Regional lymph nodes are slightly enlarged and painful on palpation. What disease are these symptoms typical for?

- A. *Acute pseudomembranous candidous stomatitis*
- B. *Chronic atrophic candidous stomatitis*
- C. *Acute herpetic stomatitis*
- D. *Diphtheria*
- E. *Measles-associated stomatitis*

9. Examination of a 6-year-old boy revealed enlarged lymph nodes in both submandibular and cervical regions. Objectively: the 75, 84 and 85 teeth are decayed, there are presentations of commissural cheilitis. According to the boy's mother, he has been quickly getting tired, sweating from the least physical exercise, complaining about weakness throughout the last 2–3 months. He also gave up training in a sports class. What plan of additional examination should be adopted?

- A. *Complete blood count, haematologist consultation*
- B. *Biochemical blood test, endocrinologist consultation*
- C. *Puncture biopsy, oncologist consultation*
- D. *Magnetic resonance tomography, immunologist consultation*
- E. *Pulmonary roentgenography, pulmonologist consultation*

**10.** A 12-year-old girl complains about swelling, reddening and itching of lips. She has a history of bronchial asthma. Such condition has been observed in the child for 3 years in winter period. Objectively: red border of lips and adjacent skin exhibit a well-defined erythema and edema, small cracks. There are signs of lip li- chenification. There are also marks of scratches on the skin of lips, cheeks and forehead in form of abrasions and crusts. Mucous membrane exhibits no pathological changes. What is the most likely diagnosis?

- |                                      |                                 |
|--------------------------------------|---------------------------------|
| <i>A. Atopic cheilitis</i>           | <i>D. Exfoliative cheilitis</i> |
| <i>B. Contact allergic cheilitis</i> | <i>E. Microbal cheilitis</i>    |
| <i>C. Meteorological cheilitis</i>   |                                 |

**11.** Parents of a 5-year-old child noted irregular colour of the child's back of tongue and consulted a pedodontist about this. Objectively: th' oral cavity is sanitized, DF index = 4, dorsal and lateral surfaces of tongue have area of desquamating epithelium bordering upon areas of hypertrophy and increased corni- fication of filiform papillae. The child has a history of being allergic to some foodstuffs. What is the clinical diagnosis?

- |                                  |                                     |
|----------------------------------|-------------------------------------|
| <i>A. Desquamative glossitis</i> | <i>D. Herpetic tongue lesion</i>    |
| <i>B. Tuberculous glossitis</i>  | <i>E. Acute catarrhal glossitis</i> |
| <i>C. Candidous glossitis</i>    |                                     |

**12.** A 4-year-old child presents with headache, nausea, pain when swallowing. Body temperature is 39 °C. Examination of the oral cavity revealed extremely hyperaemic mucous membrane and tonsils. On the first day of disease the child's tongue was furred with greyish coating, on the second day the tongue w's found to be self-purified. On the third day the tongue was smooth, of crimson colour, with hyperaemic fungiform papillae. What is presumptive diagnosis?

- |                         |                      |                      |
|-------------------------|----------------------|----------------------|
| <i>A. Scarlet fever</i> | <i>C. Measles</i>    | <i>E. Herpangina</i> |
| <i>B. Varicella</i>     | <i>D. Diphtheria</i> |                      |

**13.** A 12-year-old child complains about sore throat, headache, body temperature rise up to 38,5 °C, rhinitis, cough in summer period. Objectively: mucous membrane of oral cavity is hyperemic, edematic. There are 10–15 erosions up to 0,5 mm large on the palate and palatine arches, that aren't covered with deposit and have red floor. Regional lymph nodes are enla'ged and painful on palpation. What is the most likely diagnosis?

- |                                     |   |
|-------------------------------------|---|
| <i>A. Herpetic angina</i>           | <i>D. Chronic recurrent aphthous stomatitis</i> |
| <i>B. Acute herpetic stomatitis</i> | <i>E. Infectious mononucleosis</i>              |
| <i>C. Erythema multiforme</i>       |   |

**14.** Preventive examination of tongue back of a 6-year-old child revealed areas of epithelium desquamation in form of red oval spots located close to the zones of hyperkeratinization of filiform papillae. Clavate papillae are hypertrophic. There are no complaints. The child has a history of intestinal dysbacteriosis. What is the most likely diagnosis?

A. *Glossitis areata exfoliativa*

D. *Rhomboid glossitis*

B. *Candidal glossitis*

E. *Herpetic affection of tongue*

C. *Acute catarrhal glossitis*

**15.** According to the mother, a 5-year-old child complains about pain during swallowing, weakness, body temperature rise up to 39,5 °C, swelling of submental lymph nodes. Objectively: the child's condition is grave, body temperature is 38,8 °C. Mucous membrane of oral cavity is brightly hyperemic and edematous with haemorrhages and ulcerations. Pharynx is brightly hyperemic, lacunae are enlarged and have necrosis areas. Regional, cervical, occipital lymph nodes are painful, enlarged and dense. What is the most likely diagnosis?

A. *Infectious mononucleosis*

D. *Herpetic angina*

B. *Acute herpetic stomatitis*

E. *Lacunar tonsillitis*

C. *Necrotizing ulcerative gingivostomatitis*

**16.** A 3-month-old child has been in disease state for two days. The child is anxious, refuses food, has normal body temperature. Objectively: mucous membrane of oral cavity is edematous and hyperemic. There is white caseous coating on the back of tongue and buccal mucosa. After the coating removal one can see extremely hyperemic surface with petechial haemorrhages. What is the most likely diagnosis?

A. *Acute candidal stomatitis*

D. *Hongkong angina*

B. *Mild leukoplakia*

E. *Lichen ruber planus*

C. *Acute herpetic stomatitis*

**17.** Parents of an 8-year-old child complain about a painful formation in the child's oral cavity that obstructs food intake. The same complaints were registered two years ago. Mucous membrane of lateral tongue surface is hyperemic and edematous. There is an oval erosion over 0,7 cm large covered with yellow greyish deposit. Erosion edges are hyperemic and painful on palpation. The child has a history of chronic cholecystocholangitis. What is the most likely diagnosis?

A. *Chronic recurrent aphthous stomatitis*

D. *Stevens-Johnson syndrome*

B. *Erythema multiforme*

E. *Traumatic erosion*

C. *Behcet's syndrome*

**18.** A 10,5-year-old child complains about painful skin rash on his lips. Objectively: red border is edematous and hyperemic, covered with cracks and multiple bloody crusts. There are small vesicles with serous contents on the upper lip skin that merge together in certain areas. Maceration and maturation of skin is also present, especially in the mouth corners. What is the most likely diagnosis?

A. *Eczematous cheilitis*

D. *Actinic cheilitis*

B. *Meteorological cheilitis*

E. *Exfoliative cheilitis*

C. *Atopic cheilitis*

**19.** A 16-year-old teenager complains about halitosis, general weakness, body temperature rise up to 37,6 °C. These symptoms turned up two days ago, the boy had a history of recent angina. Objectively: oral hygiene is unsatisfactory, the teeth are coated with soft dental deposit. Gums are hyperemic, gingival papillae are covered with greyish deposit. Specify the causative agent of this disease:

- A. *Fusobacteria, spirochetes*      C. *Herpes viruses*      E. *Yeast fungi*  
 B. *Streptococci*      D. *Staphylococci*

**20.** During the planned oral cavity sanitation an 11,5-year-old girl complained about periodic spontaneous chilalgia during food intake. Objectively: mucous membrane of lips is hyperemic, edematic and dry. During talking one can observe small drops of mucous secretion. Make the provisional diagnosis:

- A. *Cheilitis glandularis*      D. *Contact allergic cheilitis*  
 B. *Angular cheilitis*      E. *Cheilitis exfoliativa*  
 C. *Eczematous cheilitis*

**21.** Parents of a 5-month-old baby complain of food refusal, ulcers on the palate. The infant was born prematurely, is now artificially fed. Objectively: at the junction of hard and soft palate there is an oval well-defined ulcer, covered with yellow-gray film and limited by a hyperemic swelling, protruding above the surface of oral mucosa. Which group of drugs should be administered for the aphtha epithelization?

- A. *Keratoplastic agents*      C. *Antimycotic drugs*      E. *Antibiotics*  
 B. *Antiviral drugs*      D. *Antiseptics*

**22.** 10-year-old child complains of sore throat, cough, fever (up to 38.0 °C). These presentations turned up 2 days ago. Objectively: acute catarrhal stomatitis is present. Tonsils are swollen, hyperemic, covered with yellow-gray friable film which can be easily removed. Submandibular and cervical lymph nodes are significantly enlarged, painful on palpation. Laboratory analysis revealed leuko- and monocytosis. What is the most likely diagnosis?

- A. *Infectious mononucleosis*      C. *Scarlet fever*      E. *Measles*  
 B. *Diphtheria*      D. *Rubella*

**23.** Parents of a 1,5-month-old child complain of whitish depositions on the child's buccal and labial mucosa. Objectively: labial and buccal mucosa is hyperemic and covered with caseous deposition that can be easily removed. Specify the causative agent of this disease:

- A. *Candida fungi*      C. *Fusiform bacillus*      E. *Diplococci*  
 B. *Vincent's spirochaetes*      D. *Loeffler's bacillus*

**24.** A 7-year-old boy complains of fever up to 38.0 °C, headache, sore throat. Objectively: slightly hyperemic soft palate mucosa, anterior palatine arches and tonsils exhibit erosions. Submandibular lymph nodes are slightly enlarged, painless. What is the causative agent of this disease?

- A. *Coxsackie virus*      C. *Epstein-Barr virus*      E. *Bordet-Gengou bacillus*  
 B. *Herpes simplex*      D. *Loeffler's Bacillus*

**25.** A 4,5-year-old child presents with eruptions on skin and in the mouth which appeared on the previous day. Objectively: the child is in medium severe condition, body temperature is 38,3 °C. Scalp, trunk skin and extremities are covered with multiple vesicles with transparent content. Mucous membrane of cheeks, tongue, hard and soft palate exhibits roundish erosion covered with fibrinous film. Gums remain unchanged. Submandibular lymph nodes are slightly enlarged. What diagnosis can be assumed?

- A. *Chicken pox-induced stomatitis*      D. *Measles-induced stomatitis*  
 B. *Acute herpetic stomatitis*      E. *Scarlet fever-induced stomatitis*  
 C. *Exudative erythema multiforme*

**26.** A 7-year-old child presents with deterioration of general health status, body temperature rise up to 38,0 °C. Objectively: buccal mucosa is covered with white maculae of a pinhead size, protruding above the level of the mucosa. There are pink maculae on the palate. What is the most likely diagnosis?

- A. *Measles*      C. *Scarlet fever*      E. *Infectious mononucleosis*  
 B. *Chicken pox*      D. *Diphtheria*

**27.** Examination of a 6-year-old boy revealed enlarged lymph nodes in both submandibular and cervical regions. Objectively: the 75, 84 and 85 teeth are decayed, there are presentations of commissural cheilitis. According to the boy's mother, he has been quickly getting tired, sweating from the least physical exercise, complaining about weakness throughout the last 2–3 months. He also gave up training in a sports class. What plan of additional examination should be adopted?

- A. *Complete blood count, haematologist consultation*  
 B. *Biochemical blood test, endocrinologist consultation*  
 C. *Puncture biopsy, oncologist consultation*  
 D. *Magnetic resonance tomography, immunologist consultation*  
 E. *Pulmonary roentgenography, pulmonologist consultation*

**28.** A 6-year-old child presents with weakness, pain in throat when swallowing, body temperature rise up to 38,0 °C. Examination of the the oral cavity revealed massive hyperaemia of the mucous membrane of the soft palate, palatine arches, tonsils, uvula; there were also single vesicles and erosions extremely painful when touched. Regional lymph nodes are enlarged, painful on palpation. What is the most likely diagnosis?

- A. *Herpangina*      C. *Mycotic angina*      E. *Diphtheria*  
 B. *Chickenpox*      D. *Infectious mononucleosis*

**29.** A 12-year-old child complains of body temperature rise up to 39,8 °C, weakness, headache and pain in throat getting worse when swallowing. Objectively: mucous membrane of gums is edematic, hyperemic. Tonsils are bright red, hypertrophic, covered with yellow-gray deposit which does not extend beyond the lymphoid tissue and can be easily removed.



Submandibular, occipital lymph nodes are significantly enlarged, slightly painful on palpation. Hepatosplenomegaly is present. Identify the causative agent of this disease:

- A. *Epstein-Barr virus*                      C. *Coxsackie virus*    E. *Loeffler's Bacillus*  
B. *Bordet-Gengou bacillus*        D. *Herpes virus*

**30.** According to the mother, a 5-year-old child complains about pain during swallowing, weakness, body temperature rise up to 39,5 °C, swelling of submental lymph nodes. Objectively: the child's condition is grave, body temperature is 38,8 °C. Mucous membrane of oral cavity is brightly hyperaemic and edematous with haemorrhages and ulcerations. Pharynx is brightly hyperemic, lacunae are enlarged and have necrosis areas. Regional, cervical, occipital lymph nodes are painful, enlarged and dense. What is the most likely diagnosis?

- A. *Infectious mononucleosis*                      D. *Herpetic angina*  
B. *Acute herpetic stomatitis*                      E. *Lacunar tonsillitis*  
C. *Necrotizing ulcerative gingivostomatitis*

**31.** Parents of an 8-year-old child complain about a painful formation in the child's oral cavity that obstructs food intake. The same complaints were registered two years ago. Mucous membrane of lateral tongue surface is hyperemic and edematous. There is an oval erosion over 0,7 cm large covered with yellow greyish deposit. Erosion edges are hyperemic and painful on palpation. The child has a history of chronic cholecystocholangitis. What is the most likely diagnosis?

- A. *Chronic recurrent aphthous stomatitis*        D. *Stevens-Johnson syndrome*  
B. *Erythema multiforme*                      E. *Traumatic erosion*  
C. *Behcet's syndrome*

**32.** Objective examination of a 10-year-old child revealed that the whole lower lip was slightly hyperemic, infiltrated, dry, covered with small scales. Architectonics of lips is changed. The child complains of dryness and a feeling of tense lips, especially in autumn and winter. The child had a bad habit of lip sucking. What is the most likely diagnosis?

- A. *Meteorological cheilitis*                      D. *Exfoliative cheilitis*  
B. *Allergic cheilitis*                      E. *Microbial cheilitis*  
C. *Atopic cheilitis*

**33.** A 12-year-old boy complains of fever up to 38.0 °C, weakness, headache, pain in the mouth, presence of vesicles and ulcers. The acute condition developed three days ago. The patient has a history of recent pneumonia treated with antibiotics. Objectively: oral mucosa is hyperemic and edematous. The mucosa of lips, tongue and cheeks has large erosions covered with fibrinous pellicle. The lips are covered with thick brown crusts. The back of the hand has papules of double-contour colour. Which of the listed agents should be primarily used in the topical treatment?

- A. *Painkillers*                      C. *Antiviral*                      E. *Antifungal*  
B. *Antiinflammatory*        D. *Antimicrobial*

**34.** A 14-year-old boy complains of rash on the lips, pain while talking and eating. These presentations showed up three days ago. Similar rash has appeared 1-4 times a year for three years. Objectively: general condition is satisfactory, the body temperature is of 36,9 °C. On the vermilion border of the lower lip and the skin below there are multiple small grouped vesicles with serous content, and crusts. What is the etiology of the disease?

- A. *Herpes simplex virus*      C. *Streptococci*      E. *Staphylococci*  
 B. *Coxsackie virus*      D. *Herpes zoster Virus*

**35.** According to the mother, a 5-year-old child complains about pain during swallowing, weakness, body temperature rise up to 39,5 °C, swelling of submental lymph nodes. Objectively: the child's condition is grave, body temperature is 38,8 °C. Mucous membrane of the oral cavity is markedly hyperaemic and edematous with haemorrhages and ulcerations. Pharynx is markedly hyperemic, lacunae are enlarged and have necrosis areas. Regional, cervical, occipital lymph nodes are painful, enlarged and dense. What is the most likely diagnosis?

- A. *Infectious mononucleosis*      D. *Herpetic angina*  
 B. *Acute herpetic stomatitis*      E. *Lacunar tonsillitis*  
 C. *Necrotizing ulcerative gingivostomatitis*

**36.** Parents of a 2-month-old baby complain about caseous films on the mucous membrane of his cheeks and tongue. After examination the child has been diagnosed with acute oral candidiasis of moderate severity. Topical treatment should be started with the administration of the following agents:

- A. *Antifungal*      C. *Antiseptic*      E. *Antiviral*  
 B. *Keratoplastic*      D. *Enzymatic*

**37.** A 10-year-old girl complains of bleeding from the alveolar socket of the extracted 63 tooth lasting for three days. The patient has a history of prolonged bleeding after removal of primary teeth and frequent nosebleeds. Objectively: oral mucosa is pale, there are small hemorrhages. The socket of the extracted 63 tooth is filled with a big bulging clot with blood oozing from under it. Forearm skin has petechiae. What specialist should be visited in the first place?

- A. *Hematologist*      D. *Infectious diseases specialist*  
 B. *Neuropathist*      E. *Gastroenterologist*  
 C. *Endocrinologist*

**38.** A 12-year-old child complains of burning lips, pain at mouth opening, yellowish crusts on the vermilion border. Objectively: there are yellowish crusts on the vermilion border extending from one mouth corner to another, from the wet-dry line to the middle of the vermilion border. When the crusts are removed, the smooth bright red moist surface can be seen. What is the most likely diagnosis?

- A. *Exfoliative cheilitis*      C. *Meteorological cheilitis*      E. *Glandular cheilitis*  
 B. *Atopic cheilitis*      D. *Eczematous cheilitis*

**39.** A 5-year-old girl complains of pain in the mouth corners occurring when opening the mouth. She has a history of acute bronchitis and prolonged antibiotic therapy. Objectively: the vermilion border of lips is dry, the mouth corners are downturned. In the mouth corners there are cracks covered with a white plaque and surrounded by a slightly hyperemic elevation, tender on palpation and mouth opening. Oral mucosa exhibits no pathological alterations, dmf – 2, hygiene index – 2,0. What is the most likely diagnosis?

- |                                    |                                 |
|------------------------------------|---------------------------------|
| <i>A. Mycotic cheilitis</i>        | <i>D. Glandular cheilitis</i>   |
| <i>B. Streptococcal cheilitis</i>  | <i>E. Exfoliative cheilitis</i> |
| <i>C. Meteorological cheilitis</i> |                                 |

**40.** A 7-year-old child complains of fever up to 38,3 °C, headache, sore throat and general weakness. Objectively: the mucosa of the soft palate, tonsils and palatine arches is edematous and hyperemic, there are numerous small painful erosions with red bottom. The erosions are not covered with any plaque. The submandibular lymph nodes are enlarged, painful on palpation. What is the most likely diagnosis?

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| <i>A. Herpetic angina</i>           | <i>D. Scarlet fever stomatitis</i> |
| <i>B. Acute herpetic stomatitis</i> | <i>E. Diphtheric stomatitis</i>    |
| <i>C. Infectious mononucleosis</i>  |                                    |

**41.** A 7-year-old child with a marked bilateral swelling of the parotid regions, tenderness on palpation of the tragus, condylar and mastoid process, dryness of the oral mucosa was diagnosed with mumps of a mild severity grade. Select a medical tactic with respect to this severity grade:

- A. Outpatient treatment with isolation of the child*
- B. Outpatient treatment without isolation of the child*
- C. Hospitalization in children's department of oral and maxillofacial Surgery*
- D. The child is allowed to attend children's institutions*
- E. Hospitalization in the infectious diseases hospital*

**42.** Examination of a 12-year-old child revealed a significant increase in the size of the jaws, presence of gaps between the teeth, tongue enlargement, disproportionate skeletal growth. This pathology has been caused by the dysfunction of the following gland:

- |                     |                       |               |
|---------------------|-----------------------|---------------|
| <i>A. Pituitary</i> | <i>C. Parathyroid</i> | <i>E. Sex</i> |
| <i>B. Thyroid</i>   | <i>D. Pancreas</i>    |               |

**43.** A mother consulted a dentist about the lip lesions in her child. Throughout the 1–2 year of life, the child had diathesis of moderate severity with affection of the face skin. Objectively: the lips are somewhat edematous, there are dry crusts on the vermilion border and the lip skin, in the mouth corners there are cracks and radial scars. The eyelids are edematous with hyperemic edges. What is the most likely diagnosis?

- |                                 |                                    |
|---------------------------------|------------------------------------|
| <i>A. Eczematous cheilitis</i>  | <i>D. Meteorological cheilitis</i> |
| <i>B. Exfoliative cheilitis</i> | <i>E. Chronic fissure of lips</i>  |
| <i>C. Glandular cheilitis</i>   |                                    |

**44.** Parents of a 6-year-old child are concerned about their child refusing to eat and having grey-and-yellow coating in the oral cavity. The symptoms are observed over a period of one year. The child complains of sharp dryness and burning pain in the mouth. The anamnesis states chronic bronchitis and systematic treatment using antibiotics. Objectively: swollen and hyperemic mucous membranes of lips and cheeks are covered in yellow and pale-grey coating. There is coating on the tongue, which is connected with the tissue, cannot be removed and has infiltration basis. What is the most probable diagnosis?

A. *Chronic candidiasis of mouth*

D. *Erythema multiforme*

B. *Acute herpetic stomatitis*

E. *Acute candidiasis of mouth*

C. *Chronic recurrent aphthous stomatitis*

**45.** A 7-year-old boy complains of increased body temperature, up to 38.0 °C, headache, sore throat. Objectively: there are erosions on the slightly hyperemic mucosa of the soft palate, anterior palatal bars, tonsils. The submandibular lymph nodes are slightly enlarged, painless. What is the causative agent of this disease?

A. *Coxsackie virus*

D. *Klebs-Loeffler bacillus*

B. *Herpes simplex virus*

E. *Bordet-Gengou bacillus*

C. *Epstein-Barr virus*

**46.** A 15-year-old adolescent complains of high body temperature up to 39,5–40,0 °C, vomiting, headache and sore throat, especially when swallowing. Objectively: oral mucosa is swollen, hyperemic. The patient is diagnosed with acute catarrhal gingivitis. The tonsils are hypertrophic and covered with yellow-grey coating that does not spread from lymphoid tissue and is easily removed. Submandibular, cervical, and occipital lymph nodes are significantly enlarged since the very first day of illness and are painful when palpated. The liver and spleen are enlarged. What is the most probable diagnosis?

A. *Infectious mononucleosis*

D. *Herpetic angina*

B. *Scarlatina*

E. *Measles*

C. *Diphtheria*

**47.** A 10,5-year-old child complains of painful rash on his lips. Objectively: the red border of the lips is swollen, hyperemic, covered in fissures and numerous scabs of dried blood. The skin of the upper lip has small blisters containing serous substance, which merge with each other in some places. Maceration and weeping skin also can be observed, especially in the corners of the mouth. What is the most probable diagnosis?

A. *Exematous cheilitis*

D. *Actinic cheilitis*

B. *Meteorological cheilitis*

E. *Exfoliative cheilitis*

C. *Atopic cheilitis*

## 2017

1. A 12-year-old boy complains of painful and bleeding gums on his upper jaw. Objectively the gingival margin in the area of the 13, 12, 11, 21, 22, 23 teeth is swollen, hyperemic, deformed due to overgrowths. Gingival papilla cover the crowns by 1/3 of their height, bleed on touch. Upper front teeth are overcrowded. X-ray shows no pathological changes of the periodontium. What drugs should be administered for topical treatment in the first place?

- A. *Nonsteroidal antiinflammatory drugs*
- B. *Sclerosants*
- C. *Steroidal antiinflammatory drugs*
- D. *Keratoplastic agents*
- E. *Cytostatic agents*

2. A 7-year-old boy complains of increased body temperature, up to 38.0 °C, headache, sore throat. Objectively: there are erosions on the slightly hyperemic mucosa of the soft palate, anterior palatal bars, and tonsils. The submandibular lymph nodes are slightly enlarged, painless. Name the causative agent of this disease:

- A. *Coxsackie virus*
- B. *Herpes simplex virus*
- C. *Epstein-Barr virus*
- D. *Klebs-Loeffler bacillus*
- E. *Bordet-Gengou bacillus*

3. A 6-year-old boy complains of a cavity in the previously treated tooth. Objectively: in the 85 tooth there is a carious cavity within mantle dentin; the dentin is dense and pigmented; probing of the cavity floor and walls, thermal stimuli, and percussion are painless. Sensitivity of the dentin/enamel junction is observed during the cavity preparation. Make the diagnosis:

- A. *Chronic median caries*
- B. *Chronic deep caries*
- C. *Acute median caries*
- D. *Acute deep caries*
- E. *Chronic superficial caries*

4. A 10-month-old child is fussy, refuses to eat. Disease onset was 2 days ago. The child is being treated by a pediatrician for pneumonia, receives antibiotics and sulfanilamides. Objectively: the oral mucosa is hyperemic, swollen; there is whitish coating on the mucosa of the cheeks, lips, soft and hard palate; coating removal can cause erosions. Submandibular lymph nodes are enlarged. What is the most likely diagnosis?

- A. *Acute candidal stomatitis*
- B. *Acute herpetic stomatitis*
- C. *Geographic tongue*
- D. *Allergic contact stomatitis*
- E. *Chronic candidal stomatitis*

5. Parents of a 12-year-old child are concerned about the child having white spots on the frontal teeth of the upper jaw; the spots appeared half a year ago. Objectively: there are chalky spots detected in the cervical zone vestibular surfaces of the 13, 12, 11, 21, 22, and 23 teeth. The enamel in those spots is dull; probing revealed it to be pliant and coarse. The

anamnesis states short-time pain caused by chemical stimuli. What is the provisional diagnosis?

- A. *Acute initial caries*
- B. *Chronic initial caries*
- C. *Acute superficial caries*
- D. *Systemic hypoplasia of enamel*
- E. *Dental fluorosis*

**6.** A 14-year-old girl complains of bleeding gums and foul smell from her mouth. Objectively: gingival mucosa is hyperemic, pastose, hemorrhaging. Schiller-Pisarev test is positive. Papillary marginal alveolar index is 70 %. Fedorov-Volodkina Hygiene Index equals 3. X-ray of the frontal area of jaws demonstrates retained cortical plate. Make the diagnosis:

- A. *Chronic generalized catarrhal gingivitis*
- B. *Chronic generalized periodontitis*
- C. *Acute generalized catarrhal gingivitis*
- D. *Chronic generalized hypertrophic gingivitis*
- E. *Exacerbation of chronic generalized periodontitis*

**7.** A 10,5-year-old child complains of painful rash on his lips. Objectively: the red border of the lips is swollen, hyperemic, covered in fissures and numerous scabs of dried blood. The skin of the upper lip has small blisters containing serous substance, which merge with each other in some places. Maceration and weeping skin also can be observed, especially in the corners of the mouth. What is the most likely diagnosis?

- A. *Exematous cheilitis*
- B. *Meteorological cheilitis*
- C. *Atopic cheilitis*
- D. *Actinic cheilitis*
- E. *Exfoliative cheilitis*

**8.** Parents of an 8-year-old child complain of rashes in the child's oral cavity. Lately the child has been inert, refused to eat. On the oral mucosa there are small round erosions with clear margins. There are vesicles with turbid content on the child's face and scalp. Make the provisional diagnosis:

- A. *Chickenpox*
- B. *Measles*
- C. *Hypertensive-hydrocephalic syndrome*
- D. *Infectious mononucleosis*
- E. *Scarlet fever*

**9.** A 5-year-old child complains of spontaneous pain in an upper jaw tooth on the right that aggravates at night and during eating cold food. Objectively: the 65 tooth has a deep cavity communicating with the tooth cavity. Probing is painful, percussion is painless. Cold water causes long-term pain. What is your provisional diagnosis?

- A. *Exacerbation of chronic pulpitis*
- B. *Acute periodontitis*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute serous pulpitis*
- E. *Acute suppurative pulpitis*

**10.** A 10-year-old girl complains of sensations of dryness and pain in her lips, which develop in the summer. On examination: the red border has areas of congestive hyperemia and infiltration, scales and scabs, that, when

removed, result in hemorrhaging erosions. The skin surrounding lips is unaltered. No rashes are detected on the oral mucosa. What is the most likely diagnosis?

- A. *Actinic cheilitis, dry form*
- B. *Actinic cheilitis, exudative form*
- C. *Atopic cheilitis*
- D. *Allergic contact cheilitis*
- E. *Meteorological cheilitis*

**11.** A 8,5-year-old child is mostly healthy. There is a complaint of pain in the upper left tooth, due to it having been physically damaged 3 hours ago. Objectively: 1/2 of the 21 tooth crown is destroyed, the pulp is significantly exposed, red, sharply painful and bleeding when probed. Percussion of the 21 tooth is sharply painful. Choose the optimal method of the 21 tooth treatment:

- A. *Vital amputation*
- B. *Vital extirpation*
- C. *Devital amputation*
- D. *Devital extirpation*
- E. *Biological method*

**12.** A 11-year-old child complains of pain during eating food, especially hot, in the lower right lateral tooth. On the masticatory surface of the 46 tooth there is a large carious cavity filled with softened light-brown dentin. The cavity is located within parapulpal dentin. In the projection of mesiobuccal pulp horn the carious cavity communicates with the pulp chamber. Deep probing is painful. Electric pulp test – 60 microamperes. Make the diagnosis:

- A. *Chronic gangrenous pulpitis*
- B. *Chronic hypertrophic pulpitis*
- C. *Acute diffuse pulpitis*
- D. *Chronic fibrous pulpitis*
- E. *Acute focal pulpitis*

**13.** An 18-year-old patient complains of a white spot on the vestibular surface of the 21 tooth. Objectively: the white spot is located near the cutting edge. The spot surface is glossy, its size remains unaltered on drying. Make the diagnosis:

- A. *Local hypoplasia*
- B. *Fluorosis*
- C. *Initial caries*
- D. *Enamel necrosis*
- E. *Amelogenesis imperfect*

**14.** Spot X-ray is performed for a 12-yearold child. The X-ray film shows the 35 tooth root to be of normal length, its walls are parallel to each other and gradually thin out towards the apex. At the entrance the root canal is slightly smaller in diameter than near the forming apex. The periodontal fissure is uniformly wide along the whole length of the formed part of the root. In the apical area of the root it merges with growth zone. What stages of root and periodontium development correspond with this X-ray image?

- A. *Unformed apex*
- B. *Lengthwise growth of a root*
- C. *Open apical foramen*
- D. *Unformed periodontium*
- E. *Fully formed root and periodontium*

**15.** A 14-year-old boy complains of rapid wearing-off of tooth crowns. Objectively: tooth crowns are worn-off by 1/3. Enamel easily chips off and is pale gray in color. Make the diagnosis:

- A. *Stainton-Capdepon syndrome*      D. *Systemic hypoplasia*
- B. *Dentinogenesis imperfecta*      E. *Focal hypoplasia*
- C. *Fluorosis*

**16.** A 14-year-old child complains of throbbing undulating pain in the lower left teeth, which aggravates due to hot stimuli. Objectively: on the masticatory surface of the 36 tooth there is a carious cavity within parapulpal dentin, which is non-communicating with the dental cavity. The cavity floor probing is painless, tooth percussion is painful. What treatment method would be optimal in the given case?

- A. *Vital extirpation*      C. *Devital amputation*      E. *Biological method*
- B. *Devital extirpation*      D. *Vital amputation*

**17.** A 10-year-old boy complains of acute pain attacks in the area of his upper left teeth. The toothache persisted for a night. Objective examination revealed a carious cavity on the masticatory surface of the 26 tooth within parapulpal dentin. Probing is sharply painful at all points of the cavity floor. Markedly positive reaction to cold water stimulus is observed. Select the most likely diagnosis:

- A. *Acute diffuse pulpitis*
- B. *Acute serous periodontitis*
- C. *Acute suppurative pulpitis*
- D. *Acute suppurative periodontitis*
- E. *Acute local pulpitis*

**18.** A 15-year-old patient complains of carious cavity and short-term "lightning-fast" pain attacks in the 26 tooth. The pain attacks in 1–2 minutes after eating. Objectively: there is a deep carious cavity filled with softened dentin. The cavity floor is painful on probing. Make the diagnosis:

- A. *Pulpal hyperemia*      D. *Acute local pulpitis*
- B. *Acute traumatic pulpitis*      E. *Acute diffuse pulpitis*
- C. *Acute suppurative pulpitis*

**19.** Mother of a 10-year-old girl complains of a cosmetic defect of the child's 22 tooth that erupted with damaged enamel. Anamnesis states premature extraction of the 62 tooth due to caries complication. There is a white-yellow spot with clear margins on the vestibular surface of the 22 tooth. Enamel retains glossiness, no surface roughness can be detected on probing. Make the diagnosis:

- A. *Local enamel hypoplasia*      D. *Chronic superficial caries*
- B. *Fluorosis*      E. *Systemic enamel hypoplasia*
- C. *Acute superficial caries*



**20.** A 16-year-old adolescent girl complains of pain caused by cold stimuli and food particles retained in her upper jaw tooth. Objectively: on the contact surface of the 24 tooth there is a carious cavity within parapulpal dentin. The cavity floor and walls are covered with light softened dentin. The carious cavity floor is sensitive to probing, percussion of the 24 is painless. Cold water stimulus is painful, the pain quickly abates after the stimulus is removed. Make the diagnosis:

- |                                  |                                    |
|----------------------------------|------------------------------------|
| <i>A. Acute deep caries</i>      | <i>D. Chronic fibrous pulpitis</i> |
| <i>B. Acute median caries</i>    | <i>E. Chronic deep caries</i>      |
| <i>C. Acute diffuse pulpitis</i> |                                    |

**21.** A 15-year-old girl complains of brief pain attacks in her teeth due to chemical stimuli. Objectively: on the contact surfaces of the 11, 21, and 22 teeth there are enamel areas matt white in color, with lost shine, covered in large amount of dental deposit. Enamel is softened and can be easily chipped off with excavator. Probing of lesions is painless. Percussion is painless. No reaction to cold stimuli. Make the diagnosis:

- |                                    |                                      |
|------------------------------------|--------------------------------------|
| <i>A. Acute superficial caries</i> | <i>D. Chronic initial caries</i>     |
| <i>B. Acute median caries</i>      | <i>E. Chronic superficial caries</i> |
| <i>C. Acute initial caries</i>     |                                      |

## **Pediatric Oral and Maxillofacial Surgery (base 2008–2017)**

### **1. Anesthesia and teeth extraction**

**1.** An 8-year-old boy was referred to the oral surgery for extraction of his 64 tooth because of acute condition of chronic periodontitis. Tooth crown is intact. What instrument should be applied?

- A. S-shaped forceps without thorns*
- B. Beak-shaped forceps with non-converging beaks*
- C. Straight forceps*
- D. Broad-beaked forceps*
- E. S-shaped forceps with thorns*

**2.** A 14-year-old child has orthodontic indication for extraction of the 14 tooth. What forceps should be applied for extraction of the 14 tooth?

- |                                  |                                  |
|----------------------------------|----------------------------------|
| <i>A. S-shaped forceps</i>       | <i>D. Beak-shaped forceps</i>    |
| <i>B. Straight forceps</i>       | <i>E. Curved on flat forceps</i> |
| <i>C. Bayonet-shaped forceps</i> |                                  |

**3.** A 14-year-old child was undergoing extraction of the 16 tooth on account of chronic periodontitis. During the tooth extraction it came to perforation of maxillary sinus along with penetration of the distal buccal root into the maxillary sinus. What is the further dentist's tactics?

- A. The patient should be directed to the hospital for a surgical procedure*
- B. The dentist himself should try to extract the root*
- C. The dentist should form a clottage without informing the patient*
- D. The dentist should close the perforation with mucoperiosteal graft*
- E. The dentist should perform maxillary sinusotomy in the outpatient setting*

4. An 8-year-old child was diagnosed with granulating periodontitis of the 55 tooth. The crown is completely destroyed. X-ray picture shows separated tooth roots. Choose an optimal tool for operative intervention:

- A. Root bayonet-shaped forceps
- B. Root straight forceps
- C. Root beak-shaped forceps
- D. Crown bayonet-shaped forceps
- E. Crown S-shaped forceps

5. A 7-year-old child was diagnosed with chronic periodontitis of the 64, 85 teeth. The child suffers from hemophilia A. Specify the treatment tactics:

- A. Extraction of teeth in hematological department after due pretreatment
- B. Extraction of teeth is possible in both in-patient and out-patient hospitals
- C. Extraction of teeth can be performed in an out-patient hospital with the following socket tamponade by means of hemostatic sponge
- D. Extraction of teeth can be performed in the oral surgery department
- E. Extraction of teeth is contra-indicated because of high risk of haemorrhage

6. Parents of an 8-year-old child with Down syndrome took the child to a doctor for oral cavity sanitation. After the examination entailing great difficulties the child was found to have four teeth decayed as a result of chronic periodontitis. What kind of anesthesia should be chosen for surgical sanitation in one visit?

- A. Phlebonarcosis
- B. Conduction anesthesia
- C. Mask anesthesia
- D. Endotracheal anesthesia
- E. Endotracheal anesthesia through a tracheostoma

7. A 3-year-old girl has been diagnosed with acute odontogenic mandibular periostitis beginning from the 74 tooth. It is required to perform periostomy and extract the 74 tooth. The child is excited. Select the optimal type of anesthesia for the surgery:

- A. Phlebonarcosis
- B. Inferior alveolar nerve block
- C. Mask anesthesia
- D. Intubation anesthesia
- E. Central anesthesia

8. A 7-year-old child has been diagnosed with chronic periodontitis of the 64 and 65 teeth. The child has a history of hemophilia A. What is the medical tactics of choice?

- A. Extraction of the affected teeth in the hematology department after taking the appropriate preparatory measures
- B. Extraction of the affected teeth is possible both on an in-patient and out-patient basis
- C. Extraction of the affected teeth on an out-patient basis with further packing of alveolar sockets with a hemostatic sponge
- D. Extraction of the affected teeth in the maxillofacial department
- E. Extraction of teeth is contraindicated because of the high probability of bleeding

9. Parents of a 3-year-old child took the child to a pedodontist for complex dental care. The child has cerebral palsy. Objectively: there is multiple dental caries, gingival mucosa is hyperemic, oral hygiene is inadequate. What method of dental care may be appropriate in this case?

- A. *Under general anesthesia*
- B. *Under local injection anesthesia*
- C. *Under local application anesthesia*
- D. *Without anesthesia*
- E. *Treatment after administration of sedatives*

10. An 8-year-old child needs his 74th tooth extracted due to exacerbation of chronic periodontitis. What kind of anesthesia should be used?

- A. *Mandibular anesthesia*
- B. *Torusal anesthesia*
- C. *Infiltration anesthesia*
- D. *Application anesthesia*
- E. *Mental nerve block*

11. A 13-year-old child suffers from odontogenic osteomyelitis starting from the 36th tooth and complicated by abscess of the pterygomandibular space. The 36th tooth is to be extracted; it is necessary to open the pterygomandibular space. These operations require the following type of anesthesia:

- A. *General anesthesia*
- B. *Bercher-Dubov central anesthesia*
- C. *Infiltration anesthesia*
- D. *Tuberal and palatal anesthesia*
- E. *Torusal anesthesia*

12. A 13-year-old boy needs his 46th tooth extracted due to chronic granulomatous periodontitis. He has pancreatic diabetes as a concomitant disease. Choose the most advisable anesthetic and its way of administration.

- A. *Mandibular anesthesia with 3% Mepivacainum*
- B. *Scandonest solution*
- C. *Intravenous anesthesia with thiopental sodium solution*
- D. *Infiltration anesthesia with 2% lidocaine solution*
- E. *Mandibular anesthesia with Ultracain DS forte*

## 2. Maxillofacial inflammatory diseases

1. A 2-year-old girl has body temperature 38,5 °C, a swelling below her jaw on the right. On the 5th day of illness there appeared rhinitis, cough, a small movable globule under her lower jaw on the right. Objectively: general condition of the child is moderately severe. The face is asymmetric due to the swelling in the right submaxillary area. The skin is hyperemic, glossy, there is a diffuse infiltrate in the right submaxillary area spreading to the upper neck parts on the right, it is dense and painful; the skin doesn't make folds. Teeth are healthy. What is the most probable diagnosis?

- A. *Adenophlegmon of the right submaxillary area*
- B. *Acute nonodontogenic submandibular lymphadenitis on the right*
- C. *Acute purulent periostitis of mandible on the right*
- D. *Acute sialoadenitis of the right submandibular salivary gland*
- E. *Chronic osteomyelitis of mandible on the right*

2. A 12-year-old boy complains about pain and swelling in the parotidomasticatory area on the left, body temperature rises up to 37,5 °C. He has been suffering from this for 5 years. Objectively: palpation reveals a dense painful nonmobile formation 3,5 × 5 large in the parotidomasticatory area on the left. Skin color is unchanged. Orifice of the left salivary gland duct excretes transparent secretion. What is the most probable diagnosis?

- A. *Herzenberg's pseudoparotitis*
- B. *Mixed tumor of parotid gland*
- C. *Epidemic parotitis*
- D. *Acute condition of chronic parenchymatous parotitis*
- E. *Buccal abscess*

3. A boy is 1 month old. He has a wound with purulent discharge near the medial edge of inferior eyelid, on the right. The illness began abruptly; body temperature is up to 40 °C. General condition is grave. On the second day of illness there appeared an infiltration near the internal edge of orbit and cheek on the right. Skin above it is hyperemic, fluctuation cannot be detected. Palpebral fissure is narrowed. Right nasal meatus discharges pus. There is an infiltration on the vestibular surface of alveolar process and palate on the right. Mucous membrane above it along the mucogingival fold is hyperemic, there is fluctuation. What is the most probable diagnosis?

- A. *Acute hematogenous osteomyelitis*
- B. *Acute dacryocystitis*
- C. *Right-side orbital phlegmon*
- D. *Acute right-side maxillary sinusitis*
- E. *Acute serous periostitis*

4. Mother of a 2-month old child had acute purulent mastitis. After that the child got edema of left infraorbital and zygomatic areas, skin hyperemia of left face part, body temperature up to 39–40.0 °C, purulent discharges from the nose. What is presumptive diagnosis?

- A. *Acute hematogenous osteomyelitis*
- B. *Phlegmon of infraorbital area*
- C. *Acute maxillary sinusitis*
- D. *Acute odontogenous osteomyelitis*
- E. *Acute purulent periostitis*

5. A 4-year-old girl presents with body temperature rise, aggravation of general condition. The symptoms have been observed for 3 days. Objectively: general condition is grave, body temperature is 38,6 °C, the girl is anxious and pale. She presents also with halitosis, hyperemia and edema of gingival mucous membrane in the region of the 83, 84, 85 teeth on both sides from the alveolar process. The mentioned teeth are mobile; their percussion causes acute pain; the 84 tooth is filled. What is the most likely diagnosis?

- A. *Acute odontogenous mandibular osteomyelitis beginning from the 84 tooth*
- B. *Acute sialoadenitis of submandibular salivary gland*
- C. *Exacerbation of chronic periodontitis of the 84 tooth*
- D. *Suppuration of the radiculodental mandibular cyst beginning from the 84 tooth*
- E. *Acute odontogenous mandibular periostitis beginning from the 84 tooth*

6. An 8-year-old child presents with an edema of the submandibular region, the mouth can be opened by 1,5 cm, further opening is difficult, body temperature is 37,6 °C, mucogingival fold is vestibularly flattened, hyperemic and swollen. The 84 and 85 teeth have fillings; their percussion is painless. The 84 tooth exhibits I degree mobility. What is the most likely diagnosis?

- A. *Acute odontogenic periostitis*
- B. *Acute odontogenic osteomyelitis*
- C. *Chronic odontogenic periostitis*
- D. *Chronic odontogenic osteomyelitis*
- E. *Exacerbation of chronic periodontitis*

7. A 12-year-old girl complains about intense pain in the region of the 46 tooth socket that was extracted 3 days ago. The pain is irradiating along the branches of trigeminus. Objectively: lymph nodes are enlarged and painful on palpation, tissues around the tooth socket are edematous and hyperemic. The socket walls are covered with grey-and-green deposition with putrid smell. What is the most likely diagnosis?

- A. *Alveolitis*
- C. *Ostitis*
- E. *Osteomyelitis*
- B. *Pericoronaritis*
- D. *Periostitis*

8. A 3-year-old girl complains about pain and tumescence in the region of the decayed 51, 52 teeth, body temperature rise up to 37,5–37,9 °C. Objectively: the face is asymmetric because of a tumescence in the upper lip region and right infraorbital region. The crown of the 51 tooth is completely decayed. Mucous membrane in the region of the 52, 51 tooth is edematous, mucogingival fold is smoothed, palpation provokes pain, mobility of I–II degree of the 51, 52 teeth is also present. What is the most likely diagnosis?

- A. *Acute purulent odontogenic maxillary periostitis*
- B. *Acute albuminous odontogenic maxillary periostitis*
- C. *Acute odontogenic maxillary osteomyelitis*
- D. *Odontogenic abscess of infraorbital region*
- E. *Exacerbation of chronic periodontitis of the 51 tooth*

9. Parents of a 6-year-old child complain about pain in the child's submandibular region on the left, body temperature rise up to 37,5 °C. Objectively: the child's face is asymmetric due to the infiltration of the submandibular region on the left. The infiltration is soft and elastic, mobile, 2 × 2,5 cm large; its palpation is slightly painful, the skin is unchanged. The teeth are intact. Pharynx is hyperemic. What is the most likely diagnosis?

- A. *Acute serous nonodontogenic submandibular lymphadenitis*
- B. *Acute serous odontogenic submandibular lymphadenitis*
- C. *Acute purulent nonodontogenic submandibular lymphadenitis*
- D. *Acute purulent odontogenic submandibular lymphadenitis*
- E. *Submandibular adenophlegmon*

**10.** A child's mother had acute purulent mastitis. Now the 2-month-old child experiences an edema of his left infraorbital and malar regions, dermahemia of the left face side, temperature rise up to 39–40 °C, purulent discharges from the nose. What is the most likely diagnosis?

- A. *Acute hematogenous osteomyelitis*
- B. *Phlegmon of infraorbital region*
- C. *Acute maxillary sinusitis*
- D. *Acute odontogenic osteomyelitis*
- E. *Acute purulent periostitis*

**11.** According to the parents of a 7-year-old child, the child complains about weakness, body temperature rises up to 39 °C, toothache in the upper jaw on the left. Objectively: condition is grave, the child is pale and adynamic, the face is asymmetric because of infiltration of the upper jaw on the left. The 64 tooth has a carious cavity. Percussion is painful, I degree of teeth mobility is also present. There are purulent discharges from the subgingival edge of the 64 tooth. Mucogingival fold of the 63, 64, 65 teeth are smoothed. Vestibular and palatine mucous membrane is edematic. What is the most likely diagnosis?

- A. *Acute odontogenic maxillary osteomyelitis starting from the 64 tooth*
- B. *Acute albuminous maxillary periostitis*
- C. *Acute purulent odontogenic maxillary periostitis starting from the 64 tooth*
- D. *Suppurative radicular cyst of maxilla*
- E. *Acute odontogenic maxillary sinusitis*

**12.** The child is 13 years old. The disease began suddenly with a body temperature rise up to 39 °C, swelling of the upper jaw on the left. Objectively: the face is asymmetric due to the left cheek edema. The skin over the swollen area is hyperemic and tense. The 26 tooth exhibits a large carious cavity, percussion of the tooth causes pain reaction. The 25, 26, teeth are mobile. Mucogingival junction in the region of the 24, 25, 26, 27 tooth is indistinct, alveolar mucosa is hyperemic and bilaterally swollen in the region of the 25, 26, 27 teeth. What is the most likely diagnosis?

- A. *Odontogenous maxillary osteomyelitis to the left of the 26 tooth*
- B. *Odontogenous maxillary periostitis to the left of the 26 tooth*
- C. *Chronic periodontitis of the 26 tooth*
- D. *Suppuration of the radicular cyst induced by the 26 tooth*
- E. *Odontogenous purulent maxillary sinusitis induced by the 26 tooth*

**13.** 13-year-old boy complains of pain in the region of the extracted 46 tooth, irradiating to the ear and temple, halitosis. The tooth was extracted 3 days ago. Objectively: submandibular lymph nodes are enlarged, painful on palpation. Mucosa around the extracted tooth is hyperemic, edematous. The socket of the 46 tooth is filled with a gray clot. What is the most likely diagnosis?

- A. *Alveolitis of the extracted 46 tooth*
- B. *Acute odontogenous mandibular osteomyelitis starting from the 46 tooth*
- C. *Acute odontogenous lymphadenitis of the right submandibular region*
- D. *Acute odontogenous mandibular periostitis starting from the 46 tooth*
- E. *Neuralgia of the III branch of trigeminus*

**14.** A 15-year-old girl consulted a dental surgeon about a moderate swelling of the parotid-masticatory region on the left. Objectively: on palpation, the left parotid gland is nodular, dense, painless. The duct exudes somewhat turbid saliva. The duct mouth is dilated, the surrounding mucous membrane is cyanotic, pasty, with imprints of teeth. Make a diagnosis:

- A. *Chronic parenchymatous sialoadenitis*
- B. *Chronic interstitial sialoadenitis*
- C. *Sialolithiasis*
- D. *Pleomorphic adenoma*
- E. *Cyst*

**15.** A 7-year-old child presents with facial asymmetry, severe pain in the lower jaw on the left, body temperature rises up to 39,0 °C. Objectively: the face is asymmetric due to the massive swelling of soft tissues in the mandibular region on the left. The skin over the infiltration is hyperemic and cannot be plicated. Mouth opening is limited, painful. The crown of the 75 tooth is destroyed by 2/3, the tooth exhibits the grade II mobility. Percussion of the 36 tooth is painful, the 75 tooth – painless. Edema and fluctuation of soft tissues on the buccal and lingual sides of these teeth are present. What measures are to be taken in the first place?

- A. *To extract the 75 tooth, to lance the inflammation focus on both sides*
- B. *To extract the 75 tooth, to lance the inflammation focus on the buccal side*
- C. *To extract the 75, 36 teeth, to lance the inflammation focus on the buccal side*
- D. *To lance the inflammation focus on the lingual and buccal sides*
- E. *To lance the inflammation focus in the submandibular region*

**16.** 2 days ago a 12-year-old patient presented with body temperature rise up to 38,0 °C, on the second day he developed a bilateral edema in the parotid region. The skin over the edema was tense, of normal color. Palpation revealed soft, enlarged, painful parotid salivary glands. Salivation from the parotid ducts was abnormal, the duct orifices were hyperemic. Palpation caused pain in the angle of mandible, at the top of mastoid bone, in front of the antilobium. What is the most likely diagnosis?

- A. *Mumps*
- B. *Herzenberg pseudoparotitis*
- C. *Acute bacterial parotitis*
- D. *Purulent-necrotic parotitis*
- E. *Sjogren's syndrome*

**17.** A 12-year-old child complains of body temperature rise up to 39,8 °C, weakness, headache and pain in throat getting worse when swallowing. Objectively: mucous membrane of gums is edematic, hyperemic. Tonsils are bright red, hypertrophic, covered with yellow-gray deposit which does not extend beyond the lymphoid tissue and can be easily removed. Submandibular, occipital lymph nodes are significantly enlarged, slightly painful on palpation. Hepatosplenomegaly is present. Identify the causative agent of this disease:

- A. *Epstein-Barr virus*
- B. *Bordet-Gengou bacillus*
- C. *Coxsackie virus*
- D. *Herpes virus*
- E. *Loeffler's Bacillus*

**18.** A 6-year-old child presents with weakness, pain in throat when swallowing, body temperature rises up to 38,0 °C. In the oral cavity revealed massive hyperemia of the mucous membrane of the soft palate, palatine arches, tonsils, uvula; there were also single vesicles and erosions extremely painful when touched. Regional lymph nodes are enlarged, painful on palpation. What is the most likely diagnosis?

- A. *Herpangina*      C. *Mycotic angina*      E. *Diphtheria*  
 B. *Chickenpox*      D. *Infectious mononucleosis*

**19.** Examination of a 6-year-old boy revealed enlarged lymph nodes in both submandibular and cervical regions. Objectively: the 75, 84 and 85 teeth are decayed, there are presentations of commissural cheilitis. According to the boy's mother, he has been quickly getting tired, sweating from the least physical exercise, complaining about weakness throughout the last 2–3 months. He also gave up training in a sports class. What plan of additional examination should be adopted?

- A. *Complete blood count, hematologist consultation*  
 B. *Biochemical blood test, endocrinologist consultation*  
 C. *Puncture biopsy, oncologist consultation*  
 D. *Magnetic resonance tomography, immunologist consultation*  
 E. *Pulmonary radiography, pulmonologist consultation*

**20.** A 12-year-old girl undergoes treatment at the maxillofacial department for nonodontogenic abscess of the left submandibular region. Postoperative wound in the stage of granulation and epithelialization. What medications speed up these processes?

- A. *Vishnevsky ointment, methyluracil ointment, solcoseryl gel*  
 B. *Laevosin, luronitum, trypsin ointments*  
 C. *Levomecol, laevosin ointments etc.*  
 D. *Trypsin, chymotrypsin, terrilytin etc.*  
 E. *0,5–1 % dioxydin solution, 0,1–0,2 % chlorhexidine solution*

**21.** Parents of a 6-year-old child consulted a doctor about a swelling in his right parotid-masseteric region, dry mouth, fever up to 37,7 °C. Similar presentations turned up about 6 months ago. Examination revealed a tuberos, slightly painful infiltrate in the right parotid-masseteric region. Saliva is viscous, the right salivary gland duct discharges some secretion with whitish inclusions. What is the most likely diagnosis?

- A. *Exacerbation of chronic parenchymatous parotitis*  
 B. *Acute purulent parotitis*  
 C. *Mixed tumor, salivary gland type*  
 D. *Acute purulent lymphadenitis of parotid gland*  
 E. *Parotitis*



**22.** A 7-year-old child complains of pain and swelling in the left submandibular region. The swelling in this region showed up 2 days ago. Objectively: the child is in satisfactory condition, body temperature is of 37,3 °C. Face is asymmetrical due to the soft tissue swelling in the left submandibular region. Palpation reveals a round formation sized 2 × 2 cm. The formation is mobile, painful, not attached to skin. The 74 tooth is changed in color, percussion is painful. What is the provisional diagnosis?

- A. *Acute serous odontogenic lymphadenitis of the left submandibular region*
- B. *Acute serous nonodontogenic lymphadenitis of the left submandibular region*
- C. *Acute purulent odontogenic lymphadenitis of the left submandibular region*
- D. *Phlegmonous adenitis of the right submandibular region*
- E. *Lateral cervical cyst*

**23.** A 12-year-old child presents with body temperature of 38 °C, chills, nausea, vomiting, delirium, weakness. In the middle third of face there is butterfly-shaped rash. Regional lymph nodes are enlarged, slightly painful. Blood count: WBC –  $12 \times 10^9/l$ , LYMP –  $8,0 \times 10^9/l$ , ESR – 26 mm/h. Make a diagnosis:

- A. *Erysipelas*
- B. *Facial vein phlebitis*
- C. *Cutaneous actinomycosis*
- D. *Streptoderma. Submandibular lymphadenitis*
- E. *Acute nonodontogenic sinusitis*

**24.** A 2-month-old baby has acute pneumonia complicated by an abscess. In course of treatment the baby has developed soft tissue swelling of the left supraorbital and infraorbital region due to an edema and inflammatory infiltrate. The child is in grave condition. What complication has developed?

- A. *Acute hematogenous osteomyelitis of the left upper jaw*
- B. *Facial vein thrombophlebitis*
- C. *Acute dacryocystitis*
- D. *Nonodontogenic abscess of the left infraorbital region*
- E. *Nonodontogenic phlegmon of the left cheek*

**25.** A 5-year-old boy has been diagnosed with acute mumps. The child is in a moderately grave condition, body temperature is of 38,6 °C, the patient complains of acute pain in the left hypochondrium and epigastrium, radiating to the back. What complication has developed in the child?

- A. *Pancreatitis*
- C. *Epididymitis*
- E. *Gastritis*
- B. *Orchitis*
- D. *Mediastinitis*

**26.** An 8-year-old child has been clinically diagnosed with exacerbation of chronic periodontitis of the 84 tooth. The crown is decayed by half. What is the dentist's optimal tactics?

- A. *Extraction*
- B. *Endodontic treatment*
- C. *Endodontic treatment and drug therapy*
- D. *Drug therapy*
- E. *Dissection along the mucogingival junction, drug therapy*

**27.** A 6-year-old child complains of pain in the right submandibular region. A day before he complained of a sore throat. Objectively: the child is in moderately severe condition, body it is 37,9 °C. The face is asymmetric due to a dense tender infiltrate in the right submandibular region. The infiltrate is slightly mobile; the overlying skin is hyperemic. There is fluctuation in the center. The teeth are intact. What is the most likely diagnosis?

- A. *Acute suppurative non-odontogenic submandibular lymphadenitis*
- B. *Acute serous non-odontogenic submandibular lymphadenitis*
- C. *Phlegmonous adenitis*
- D. *Acute suppurative odontogenic submandibular lymphadenitis*
- E. *Sialadenitis*

**28.** A 5-month-old infant has acute hematogenous osteomyelitis of the maxilla, there are fistulae with purulent exudate at the medial angle of the right eye. Specify the probable long-term effects of the disease:

- A. *Bony ankylosis of the right TMJ*
- D. *Macrogathia*
- B. *Chronic sinusitis*
- E. *Macrogenia*
- C. *Chronic rhinitis*

**29.** A 12-year-old girl complains of acute pain in the left mandibular region, general weakness, fever up to 39 °C, difficult swallowing. Objectively: the face is asymmetric, the tongue is plaque, halitosis is present. Percussion reveals signs of acute periodontitis of the 34, 36 teeth, as well as mobility of these teeth. Gums are hyperemic, edematous, there is infiltration on both sides of the alveolar process. Regional lymph nodes are enlarged, tender on palpation. Vincent's symptom is present. Blood test results: leukocytosis with a left shift; urine contains traces of protein. What is the most likely diagnosis?

- A. *Acute odontogenic osteomyelitis of the mandible*
- B. *Acute odontogenic purulent abscess*
- C. *Exacerbation of chronic periodontitis*
- D. *Acute odontogenic purulent lymphadenitis*
- E. *Odontogenic submandibular abscess*

**30.** A 4-year-old boy has been diagnosed with acute purulent periostitis of the upper jaw from the 64th tooth. Choose the correct approach in treatment.

- A. *The 64th tooth extraction, periostotomy, pharmacotherapy*
- B. *The 64th tooth extraction, anti-inflammatory pharmacotherapy*
- C. *Endodontological treatment of the 64th tooth, anti-inflammatory pharmacotherapy*
- D. *Endodontological treatment of the 64th tooth, periostotomy*
- E. *Periostotomy, anti-inflammatory pharmacotherapy*

**31.** A 16-year-old patient has made an appointment with a doctor due to the following complaints: enlarged lymph nodes and fistula in the submandibular area; general weakness; low grade fever. Objectively: the submandibular

lymph nodes are dense and slightly painful, with clearly detectable margins. Caseous substance is produced from the fistulous tract. What is the most probable diagnosis?

- A. Tuberculosis of lymph nodes*
- B. Actinomycosis of lymph nodes*
- C. Syphilitic lymphadenitis*
- D. Chronic osteomyelitis*
- E. Subcutaneous granuloma*

**32.** A 13-year-old boy complains of general weakness, high body temperature up to 39 °C, lack of appetite, constant pain in the body of the lower jaw. Objectively: observed is significant asymmetry of the face caused by soft tissues swelling in the left buccal and submandibular areas. Mouth opening is restricted. Intraoral examination revealed the following: the 34th, 35th, 36th and 37th teeth are mobile; teeth percussion is painful. The crown of the 36th tooth is completely destroyed. The mucosa of those teeth is hyperemic and painful when palpated. Muff-like enlargement of the lower jaw alveolar process is detected. What is the most probable diagnosis?

- A. Acute mandibular odontogenic osteomyelitis*
- B. Acute mandibular hematogenous osteomyelitis*
- C. Acute mandibular odontogenic purulent periostitis*
- D. Ewing's sarcoma*
- E. Abscess of the right submandibular area*

**33.** A 10-year-old child complains of pain and swelling in the left submandibular region; eating causes pain. Objectively: the mouth can be fully opened, the mucosa of the torus mandibular is hyperemic, excretory duct produces pus. X-ray imaging reveals an oval shade in the left submandibular area. What is the most probable diagnosis?

- A. Calculous sialoadenitis of submandibular salivary gland*
- B. Mandibular osteoma*
- C. Foreign body*
- D. Chronic lymphadenitis*
- E. Chronic sialoadenitis*

**34.** A 14-year-old girl complains of indistinct pronunciation that showed up at the age of 14 after the acute respiratory viral disease. Examination revealed normal face and normal teeth alignment, occlusal disharmony was not found. Palpation didn't reveal cleft palate. Uvula doesn't move during pronunciation of sounds; its palpation does not cause gag reflex. What is the reason for indistinct pronunciation of sounds?

- A. Paresis of the soft palate and uvula muscles*
- B. Adenoid vegetation*
- C. Palatal slit*
- D. Hypertrophy of lingual tonsil*
- E. Deformation of the bite*

**35.** Parents of a 6-year-old boy complain of his high body temperature, decrease of his general well-being, painful swelling of the right cheek. Objectively: the skin is pale, the face is asymmetric due to swelling of the soft tissues of the right cheek. The maxillary alveolar process is bilaterally thickened in the area of the 55, 54 and 53 teeth, painful on palpation, these teeth are partially destroyed by caries, mobile (II–III degree), their dentogingival pockets produce pus. What is the most likely diagnosis?

- A. *Acute odontogenic osteomyelitis from the 53, 54, 55*
- B. *Acute odontogenic purulent maxillar periostitis from the 53, 54, 55*
- C. *Odontogenic buccal abscess from the 53, 54, 55*
- D. *Acute odontogenic aluminous maxillar periostitis from the 53, 54, 55*
- E. *Odontogenic buccal phlegmon from the 53, 54, 55*

**36.** A 17-year-old patient has been suffering for 2 years from periodical painful swelling and fistula appearing on the skin of gonial angle area. After cleaning the fistula of its purulent content pain and swelling disappear leaving a small concave scar. Objectively: there is a small scar on the skin in the gonial angle area. Palpation of the oral cavity floor reveals a dense band in the buccal soft tissues, which connects fistula with projection of the 47 tooth roots. Crown of the 47 is destroyed. What diagnosis is most likely?

- A. *Migrating subcutaneous granuloma*
- B. *Festered buccal atheroma*
- C. *Mandibular tuberculosis*
- D. *Actinomycosis of the parotid-masticatory area*
- E. *Chronic osteomyelitis of the left mandibular angle*

### **3. Maxillofacial traumatic damage**

**1.** A 13-year-old patient got a trauma in the area of median face zone. She complains about pain, swelling of soft tissues in the area of her upper jaw, pain during mouth closing. Examination revealed mobility of nose bones, significant swelling of soft tissues in the left zygomatic area, hemorrhage in the eye sclera, "step" signs along the inferior edge of both orbits and zygomatico-maxillary sutures, nasal hemorrhage, open bite, lengthening of median face part. Make a clinical diagnosis:

- A. *Le Fort's III fracture of upper jaw*
- B. *Le Fort's II fracture of upper jaw*
- C. *Le Fort's I fracture of upper jaw*
- D. *Fracture of nose bones*
- E. *Fracture of skull base*

**2.** A 6-year-old boy hit his forehead one day ago. A few hours later a swelling appeared in the right superciliary region. Objectively: there is a considerable edema of forehead tissues spreading to eyelids of the right eye, the skin over the swelling is cyanotic, the swelling is of soft consistency. Fluctuation is also present. General condition of the boy is normal. Make a provisional diagnosis:

- A. *Hematoma of the right superciliary region*

- B. Postraumatic edema of tissues of the right superciliary region*
  - C. Fracture of frontal bone*
  - D. Hematic abscess of the right superciliary region*
  - E. Inflammatory infiltration of tissues of the right superciliary region*
3. A 7-year-old child sustained a sport injury. He complains about pain in the region of mandible, inability to join his teeth. Pressing against the chin causes intensification of pain in the region of mandible on the right. The child is diagnosed with a fracture of mandible body without fragment displacement. What therapeutic tactics should be chosen in order to prevent the displacement of bone fragments in the transitional dentition?
- A. Fragment immobilization by means of an intraoral splint*
  - B. Administration of anti-inflammatory therapy*
  - C. Application of sling bandage*
  - D. Fixation by means of Tigerstedt splints*
  - E. Osteosynthesis*
4. A 7-year-old child has been diagnosed with a complete dislocation of the 11 tooth caused by a trauma that occurred 24 hours ago. The tooth has been taken along with the patient to the dentist's. Objectively: the alveolar socket edges are slightly hyperemic, the socket bone walls are intact, the socket itself is filled with a blood clot. What is the optimal way of treatment?
- A. Replantation of the 11th tooth with a prior filling of the channel*
  - B. Replantation of the 11th tooth before the filling of the channel*
  - C. Extraction of the 11th tooth*
  - D. Reposition and fixation of the 11th tooth*
  - E. Socket suturing with catgut*
5. A 9-year-old boy has been diagnosed with a complete dislocation of the 21 tooth. The child got injured 20 hours ago. He has diabetes. Select a treatment tactics:
- A. The tooth cannot be preserved or reimplanted*
  - B. Reimplantation, fixation of the tooth and further follow-up*
  - C. Root apex resection, reimplantation, fixation of the tooth*
  - D. Filling of the root canal with amalgam, reimplantation*
  - E. Filling of the root canal with paste containing calcium, reimplantation, fixation of the tooth*
6. A 3-year-old child got an injury of the upper teeth as a result of a fall. Objectively: crowns of the 51 and 61 teeth are deep in the surrounding tissues with only their cutting edge visible, the gingival margin is hyperemia, edematic. What is the treatment tactics?
- A. Tooth extraction*
  - B. Monitoring*
  - C. Reposition*
  - D. Endodontic treatment*
  - E. Anti-inflammatory therapy*

7. While conducting experiments in chemistry lesson a 14-year-old child got a traumatic shock of face. Objectively: the skin dehydrated in the affected region. It is covered with thick dry crust with clear boundaries and peripheral hyperemia, the crust is recessed into the skin. What is the most likely traumatic agent?

A. Acid      B. Alkaline      C. Radiation      D. Thermal      E. Saline

8. A 15-year-old patient has got a trauma. He complains of mandibular pain getting worse during swallowing, chewing, especially mouth opening. Objectively: face configuration is abnormal, there is a large hematoma in the region of the right mandibular angle. Palpation of this region is painful. The mouth is half-open, lower lip frenulum is shifted to the right of the central line. Pressing upon the chin causes pain in the part of mandible on the right. What is the provisional diagnosis?

A. Fracture of mandibular angle on the right  
B. Bilateral fracture of mandibular branches  
C. Posterior unilateral dislocation of mandible  
D. Anterior unilateral dislocation of mandible  
E. Bilateral fracture of articular processes

9. A 12-year-old boy has been injured. In the region of the 44 and 45 teeth there is pathological displacement of the alveolar process and the body of the mandible, rupture of the mucous membrane of the alveolar process. What additional tests should be done to specify the diagnosis?

A. Radiography of mandible in the frontal and lateral projections  
B. Radiography of skull in axillary projection  
C. Radiography of skull in the frontal projection and of mandible in Parma projection  
D. Tomogram of mandible  
E. Radiography of skull in the axillary projection

10. A 15-month-old child diagnosed with intrusive luxation of the 51 tooth has been referred to a children's dental surgeon. What is the optimal treatment tactics?

A. Monitoring the independent eruption of the affected tooth      D. 51 tooth splinting  
B. 51 tooth extraction      E. 51 tooth replantation  
C. 51 tooth reposition

11. A child has been admitted to a hospital with a maxillofacial trauma. It is probable that the wound has been contaminated with tetanus infection. How soon after the injury should the tetanus serum be given?

A. Immediately at the time of seeking medical help      D. Within 2 days  
B. Within 12 hours      E. Within a week  
C. Within 24 hours

**12.** As a result of an injury the 51 and 61 teeth of a 3-year-old child have completely cut into the alveolar bone. History record: the teeth were partially decayed, changed in color. Select an appropriate treatment tactics:

- A. Extraction of the injured teeth*
- B. Follow-up as the teeth may erupt again*
- C. Reposition of teeth, endodontic treatment*
- D. Extraction of teeth, endodontic treatment, reposition*
- E. Treatment is not required*

**13.** On the basis of subjective complaints, anamnesis and objective examination, a 5-year-old child has been diagnosed with impacted dislocation of the 71 tooth. What is the most appropriate treatment tactics?

- A. Extraction of the 71 tooth*
- B. Reposition and fixation of the 71 tooth*
- C. Orthodontic treatment of the 71 tooth*
- D. Endodontic treatment of the 71 tooth*
- E. No intervention is required*

**14.** A 6-year-old child with contused forehead laceration had been taken to the emergency room at a children's hospital. The child was examined by the maxillofacial surgeon who performed primary surgical debridement and closed the wound with immediate primary sutures. The child was recommended to undergo further treatment on an outpatient basis at a district polyclinic. Specify the first-priority measure in this case:

- A. Consultation by a neurosurgeon*
- B. Surgeon follow-up*
- C. Complex dental care*
- D. Antimicrobial therapy*
- E. Bed rest*

**15.** A 16-year-old boy has been diagnosed with a fracture of the left zygomatic bone with a fragment displacement. Select the most efficient method of treatment:

- A. Open reposition and osteosynthesis with metal plates*
- B. Osteosynthesis with metal wires*
- C. Any of these methods is applied in children and adolescents*
- D. Closed reposition*
- E. Bone suture*

**16.** A 5-year-old child has sustained a trauma. Objectively: the crowns of the 51st and 61st teeth are shorter than their adjacent ones. The mucosa surrounding the 51st and 61st teeth is hyperemic and swollen. X-ray imaging shows the periodontal fissure to be absent in the apical area of the 51st and 61st roots, 51st and 61st roots apices are submerged in the spongy bone of the body of the lower jaw. Choose the optimal treatment.

- A. Extraction of the 51st and 61st teeth*
- B. Splinting of teeth*
- C. Regular medical check-up*
- D. Anti-inflammatory therapy*
- E. Resection of the 51st and 61st teeth and their splinting*

17. Parents of a 5-year-old boy addressed a dental surgeon with complaints of hemorrhage occurring from the boy's mouth. According to the mother the boy had accidentally bit his tongue. Objectively: the tongue apex is damaged, the wound is 5 mm deep and is bleeding profusely. What aid should be provided?

- A. *Perform primary surgical treatment of the wound, apply blind sutures*
- B. *Prescribe antibacterial treatment and antiseptic oral rinsing*
- C. *Perform antiseptic treatment of the wound and stop the hemorrhage by pressing the tissues*
- D. *Stop the hemorrhage by ligation of the lingual artery*
- E. *Prescribe hemostatics intravenously*

18. Parents complain of painfulness and mobility of the tooth of their 4-year-old child, which developed after the impact with a wooden object. Objectively: the face is asymmetrical due to swollen tissues of the upper lip. The 51 tooth is intact, with vestibular displacement and the II degree mobility, gums around the 51 tooth are hyperemic. What preliminary diagnosis can be made?

- A. *Incomplete dislocation of the 51 tooth*
- D. *Acute aluminous periostitis*
- B. *Complete dislocation of the 51 tooth*
- E. *Acute purulent periostitis*
- C. *Contusion of the 51 tooth*

19. A 2-year-old child has suffered a teeth trauma. Objectively: the crowns of the 51 and 61 teeth are by 1/3 shorter than the others. Mucosa in the area of the 51 and 61 is hyperemic, swollen. X-ray reveals absence of the periodontal fissure in the root apex areas of the 51 and 61. What treatment tactics would be optimal?

- A. *Regular medical check-ups*
- D. *Ligature splint*
- B. *Extraction of the 51 and 61*
- E. *Dental reimplantation*
- C. *Reduction of the 51 and 61*

#### **4. Maxillofacial tumors and tumor-like formations**

1. Parents of a 1,5-year-old child complained about tongue enlargement, disturbed food intake. The child has been suffering from this since birth. Objectively: general condition has no peculiarities. Tongue is enlarged (macroglossia). Its mucous membrane has granular vesicle like outgrowths. Tongue is compact, palpatory painless. What is the most probable diagnosis?

- A. *Lymphangioma of tongue*
- C. *Tongue fibroma*
- E. *Tongue cancer*
- B. *Tongue hemangioma*
- D. *Tongue cyst*

2. Parents of a 7-year-old boy complain about missing of the 11 tooth. Objectively: there is enlargement of alveolar process in projection of the 11, 12 teeth. X-ray picture shows multiple shades of different size. They have dentate shape and look like hard tooth tissues. What is the most likely diagnosis?

- A. *Odontoma of maxilla*
- B. *Follicular cyst of maxilla starting from the 11 tooth*
- C. *Cementoma of maxilla*
- D. *Adamantinoma of maxilla*
- E. *Odontogenic fibroma of maxilla*



3. Mother of a 1,5-year-old child complains of a formation on the child's right cheek. This formation appeared a few months after birth. Objectively: on the right cheek there is a crimson formation sized 1,5–2,0 cm, painless, with a positive sign of filling. What is the most likely diagnosis?

A. *Cavernous hemangioma of the right cheek*

B. *Erysipelas*

C. *Hematoma of the right cheek*

D. *Vascular nevus*

E. *Lymphangioma of the right cheek*

4. A 2-year-old boy has a brown spot with a rough surface covered with coarse hair on his left cheek. According to parents, the neoplasm has been present since birth and exhibits a slight enlargement as the child grows. What is the most likely diagnosis?

A. *Pigmented nevus*

C. *Kaposi's sarcoma*

E. *Melanoma of cheek*

B. *Vascular nevus*

D. *Facial neurofibromatosis*

5. An 8-year-old boy has thickening of the lower jaw body in the area of the 83rd, 84th and 85th teeth. In the given area a rounded painless tissue protrusion can be detected; the Dupuytren's symptom is positive. Deciduous teeth are intact. X-ray image of the lower jaw made in lateral projection shows the focus of bone destruction with clear margins in the area of the 83rd, 84th and 85th teeth. The 44th tooth follicle is shifted down in distal direction, the crown is projected on the destruction focus. What is the clinical diagnosis?

A. *Follicular cyst of mandibula from the 44th tooth*

B. *Fibrous dysplasia of mandible*

C. *Mandibular ameloblastoma*

D. *Radicular cyst of mandibula from the 84th tooth*

E. *Mandibular osteoclastoma*

## 5. Congenital malformations

1. Parents of a 4-year-old child complain about speech defect, namely lallation. Examination shows limited tongue movements, when the tongue is moved forward it turns down, the lower edge of tongue frenulum is positioned in front of the submandibular salivary ducts. The frenulum is thin and transparent. Specify the terms of operative intervention:

A. *After making the diagnosis*

B. *After complete development of maxillofacial bones*

C. *After eruption of permanent incisors*

D. *After formation of permanent occlusion*

E. *After eruption of permanent molars*

2. A 5-year-old child has been diagnosed with congenital complete nonclosure of soft and hard palate. What type of anesthesia is indicated for uranostaphyloplasty?

A. *Nasotracheal narcosis*

B. *Mask narcosis*

C. *Intravenous narcosis*

D. *Orotracheal narcosis*

E. *Endotracheal narcosis through tracheostome*

3. An oral surgeon attended a 3-day-old child staying in the newborn pathology department. Objectively: bilateral hypogenesis of zygomatic bones and orbits, antimongoloid slant of palpebral fissures, nonclosure of inferior eyelids, hypogenesis of mandible (bird face), deformity of auricles with a preauricular fistula on the right. What congenital disease does the child have?

A. *Mandibulofacial dysostosis*

D. *Oculomandibulofacial syndrome*

B. *Mandibulofacial dysostosis*

E. *Oculodentodigital syndrome*

C. *Oculoauriculovertebral dysplasia*

4. A 7-year-old child has to undergo plastic surgery of the upper lip frenulum. What operation should be performed to lengthen the frenulum of the upper lip?

A. *Dieffenbach grafting*

B. *Thiersch grafting with local flaps*

C. *Relaxing incisions of the mucosa*

D. *Grafting with a pedicle flap*

E. *Szymanowsky grafting with local flaps*

5. A 6-year-old girl has unrestricted opening of the mouth. The alveolar process of the upper jaw is intact. Soft and hard palate are of a triangular shape and have a cleft up to the level of the 13 and 23 teeth. Soft palate is shortened. Speech is indistinct. The child was born with this defect. What is the most likely diagnosis?

A. *Natural partial cleft palate*

D. *Isolated partial uranoschisis*

B. *Isolated complete cleft palate*

E. —

C. *Submucous cleft palate*

6. A 16-year-old female patient complains of a deformation and restricted mouth opening since birth. Objectively: the face is symmetrical, disproportionate, there is a bird-like face symptom. The mouth opens up to 1 cm. The patient has an occlusal abnormality, namely deep incisal overbite. What pathology is found in this patient?

A. *Micrognathia with congenital ankylosis*

D. *Prognathism*

B. *Micrognathia with acquired ankylosis*

E. *Mandibular protraction*

C. *Maxillary protraction*

7. A 1-month-old child has been brought to a maxillofacial surgeon for examination. Objectively: there is a fissure running transversely from the right corner of mouth through the full thickness of cheek up to the anterior edge of the masseter muscle. What is the patient's diagnosis?

- A. *Right transverse facial cleft*                      D. *Right upper lip cleft*
- B. *Right oblique facial cleft*                      E. *Mandibular cleft*
- C. *Cleft nasal deformity*

8. A 2,5-year-old boy has been delivered to an oral surgery. The patient has the upper lip cleft into three fragments, the palate is whole. Specify the period when cheiloplasty should be performed:

- A. *6–10 months*                      C. *12–14 months*                      E. *20–24 months*
- B. *3–5 months*                      D. *15–19 months*

9. A mother of a newborn complains that the child cannot be breastfed. After objective examination the child was diagnosed with complete submucous cleft palate. What surgical procedure should be prescribed and when is the optimal time for such a surgery?

- A. *Uranostaphyloplasty, 4–6 years*                      D. *Staphyloplasty, 10 years*
- B. *Cheiloplasty, 4–6 months*                      E. *Uranoplasty, 1 year*
- C. *Uranostaphyloplasty, 6–7 months*

## 6. Emergencies

1. A 5-year-old child had to undergo an operation for ankyloglossia. There were no external symptoms of preoperative anxiety. After injection of 1,5 ml of 0,5 % Novocain solution the child presented with motor anxiety, vomituration, stomachache. Objectively: the child is conscious, face and neck skin is hyperemic, tachypnea is present, pulse is rapid. What is the most likely diagnosis?

- A. *Allergic reaction to Novocain*                      D. *Giddiness*
- B. *Pain shock*                      E. *Over dosage of anesthetics*
- C. *Cardiovascular collapse*

2. At a dentist's appointment a 12-year-old child inhaled a cotton turunda: he developed noisy respiration with a whistling sound, sudden dyspnea, pallor along with pronounced cyanosis, sweating. What kind of urgent condition developed in this patient?

- A. *Obstructive asphyxia*                      C. *Valvular asphyxia*                      E. *Collapse*
- B. *Dislocation asphyxia*                      D. *Anaphylactic shock*

3. A 6-year-old girl with acute purulent odontogenic lymphadenitis had been given intramuscular injection of cefazolin (0,5 twice a day). 1,5 hours after the drug injection the child developed edema of lips, cheeks, forehead, ears, mucous membrane of mouth and upper airways. What complication developed in the girl?

- A. *Angioneurotic edema*                      C. *Allergic dermatitis*                      E. *Toxic shock*
- B. *Urticaria*                      D. *Anaphylactic shock*

4. During the surgical removal of a retention cyst of the lower lip a 14-year-old boy complained of sudden weakness, dizziness, nausea. Objectively: the skin is covered with cold sweat. Respiration is frequent, pulse is weak, BP is low (90/60 mm Hg), the hands are cold. What is the most likely diagnosis?

- A. *Syncope*                                      C. *Traumatic shock*                      E. *Collapse*  
 B. *Toxic shock*                                      D. *Anaphylactic shock*

## 2017

1. Parents of a 3-year-old child report that the child suffers from constant pain in the upper front teeth. Objectively: the coronal part of the 61 tooth is gray and decayed. Probing of the root canal orifice is painful and accompanied by bleeding. The tooth percussion provokes acute pain. Mucosa is hyperemic, edematic and painful. Palpation in the region of the 61 and 62 teeth reveals a fistula. What is your provisional diagnosis?

- A. *Exacerbation of chronic periodontitis*                      D. *Chronic granulating periodontitis*  
 B. *Acute suppurative periodontitis*                      E. *Exacerbation of chronic pulpitis*  
 C. *Acute diffuse pulpitis*

2. A 7-year-old child complains of pain and swelling in the left submandibular region. The swelling in this region developed 2 days ago. Objectively: the child is in a satisfactory condition, body temperature is of 37,3 °C. Face is asymmetrical due to the soft tissue swelling in the left submandibular region. Palpation reveals a round formation 2 × 2 cm in size. The formation is mobile, painful, unattached to the skin. The 74 tooth is discolored, percussion is painful. What is the provisional diagnosis?

- A. *Acute serous odontogenic lymphadenitis of the left submandibular region*  
 B. *Acute serous nonodontogenic lymphadenitis of the left submandibular region*  
 C. *Acute suppurative odontogenic lymphadenitis of the left submandibular region*  
 D. *Phlegmonous adenitis of the right submandibular region*  
 E. *Lateral cervical cyst*

3. A 13-year-old boy complains of general weakness, high body temperature up to 39.0 °C, lack of appetite, constant pain in the body of the lower jaw. Objectively: observed is significant asymmetry of the face caused by soft tissues swelling in the left buccal and submandibular areas. Mouth opening is reduced. Intraoral examination revealed the following: the 34, 35, 36, and 37 teeth are mobile; teeth percussion is painful. The crown of the 36 tooth is completely destroyed. The mucosa of those teeth is hyperemic and painful when palpated. Mufflike enlargement of the lower jaw alveolar process is detected. What is the most likely diagnosis?

- A. *Acute mandibular odontogenic osteomyelitis*  
 B. *Acute mandibular hematogenous osteomyelitis*  
 C. *Acute mandibular odontogenic suppurative periostitis*  
 D. *Ewing's sarcoma*  
 E. *Abscess of the right submandibular area*

4. A 3-year-old child received an injury of the upper teeth as a result of a fall. Objectively: crowns of the 51 and 61 teeth are embedded deep into the surrounding tissues with only their cutting edge visible, the gingival margin is hyperemic, edematic. What is the treatment tactics?

- A. *Tooth extraction*
- B. *Monitoring*
- C. *Reposition*
- D. *Endodontic treatment*
- E. *Anti-inflammatory therapy*

5. A 15-year-old girl complains of toothache that persists for a day and increases on biting. Objectively: in the 36 tooth there is a deep carious cavity noncommunicating with the dental cavity. No reaction to the thermal stimuli is observed, probing of the carious cavity floor is painless. Vertical percussion is markedly painful. Gingival mucosa in the area of the 36 tooth is unaltered. X-ray presents with no alterations. Make the diagnosis:

- A. *Acute serous periodontitis*
- B. *Acute suppurative pulpitis*
- C. *Acute suppurative periodontitis*
- D. *Acute serous pulpitis*
- E. *Exacerbation of chronic periodontitis*

6. An 8-year-old child has been clinically diagnosed with exacerbation of chronic periodontitis of the 84 tooth. The crown is decayed by 1/2. What is the optimal tactics of dental treatment?

- A. *Extraction*
- B. *Endodontic treatment*
- C. *Endodontic treatment and drug therapy*
- D. *Drug therapy*
- E. *Opening along the mucogingival fold, drug therapy*

7. A 7-year-old child is diagnosed with chronic granulating periodontitis of the 55 tooth. Additionally accompanying diagnosis of rheumatic endocarditis is made. What treatment tactics should a dentist choose?

- A. *Tooth extraction*
- B. *Endodontic treatment*
- C. *Endodontic treatment and physical therapy*
- D. *Case monitoring*
- E. *Endodontic treatment and case monitoring*

8. A 1-month-old child has problems with breastfeeding, insufficiently gains weight. On examination a doctor made the diagnosis of abnormal attachment of the tongue frenulum. What method of surgical treatment should be chosen in this case?

- A. *Transversal dissection of the frenulum*
- B. *Lingual frenulectomy*
- C. *Vestibuloplasty*
- D. *Limberg's relocation of triangular flaps*
- E. *Dieffenbach's frenuloplasty*

9. A 7-year-old boy came to a dental surgeon with complaints of painful swelling of his right cheek and high body temperature. Objectively the body temperature is 38,2 °C, facial asymmetry caused by the right cheek edema, no skin discoloration, skin can be pinched in a fold, no mouth opening reduction. In the oral cavity the mucogingival fold in the area of the 84 and 85 teeth is smoothed out, the fold is hyperemic, fluctuation is observed. The 85 tooth is destroyed by cariosity, painless on percussion. Make the diagnosis:

- A. *Acute odontogenic suppurative mandibular periostitis originating from the 85 tooth*
- B. *Acute odontogenic aluminous mandibular periostitis originating from the 85 tooth*
- C. *Acute odontogenic mandibular osteomyelitis originating from the 85 tooth*
- D. *Suppuration of the periapical cyst of the 85 tooth*
- E. *Odontogenic abscess of the buccal area originating from the 85 tooth*

10. A 15-year-old adolescent boy complains of pain in the lower right jaw, which increases during chewing, and impaired closure of the teeth. Anamnesis: 2 days ago a trauma was received. Based on objective examination results and X-ray data the patient was diagnosed with open fracture of the mandible between the 45 and 46 teeth. Choose the method of treatment:

- A. *Removable braces*
- C. *Port's dental splint*
- E. *Ligature*
- B. *Temporary immobilization*
- D. *Rudko's appliance*

11. A 10-year-old boy complains of painful sore in the mouth, which has been persisting and increasing in size for 1,5 months. Objectively: on the buccal mucosa there is a soft shallow ulcer 2 cm in diameter with uneven undermined edges. The floor of the ulcer is tuberos, covered in yellowgray coating. The ulcer is surrounded with numerous yellowish tubercles. The regional lymph nodes are elastic, painful, and matted together. These symptoms are characteristic of the following disease:

- A. *Tuberculosis*
- D. *Cancer*
- B. *Lichen ruber planus*
- E. *Syphilis*
- C. *Necrotizing ulcerative stomatitis*

12. Parents complain of painfulness and mobility of the tooth of their 4-year-old child, which developed after the impact with a wooden object. Objectively: the face is asymmetrical due to swollen tissues of the upper lip. The 51 tooth is intact, with vestibular displacement and the II degree mobility, gums around the 51 tooth are hyperemic. What provisional diagnosis can be made?

- A. *Incomplete dislocation of the 51 tooth*
- D. *Acute aluminous periostitis*
- B. *Complete dislocation of the 51 tooth*
- E. *Acute suppurative periostitis*
- C. *Contusion of the 51 tooth*

**13.** A 7-year-old child is in a grave condition, teeth of the upper left jaw are painful, body temperature is 39,3 °C. The child is pale, adynamic; the face is asymmetrical due to infiltration in the upper left jaw. The 64 tooth is filled, painful on percussion. The 63 and 65 teeth are intact, painful on percussion. The I degree of tooth mobility is observed; pus is being discharged from under the marginal gingiva of the 64 tooth. The alveolar process is deformed at its vestibular and palatine surfaces. Make the provisional diagnosis:

- A. Acute odontogenic osteomyelitis*      *D. Ossification periostitis*
- B. Acute aluminous periostitis*          *E. Ewing's sarcoma*
- C. Acute suppurative periostitis*

**14.** A 4-year-old child has developed acute spontaneous pain in the tooth on the lower right jaw, which aggravates on biting. Objectively: in the 85 tooth there is a deep carious cavity non-penetrating to the dental cavity. Probing is sharply painful at all points of the cavity floor. Painful reaction to cold water stimulus and percussion is observed; mucosa surrounding the 85 is hyperemic. Submandibular lymphadenitis is detected. Make the provisional diagnosis:

- A. Acute pulpitis complicated with periodontitis*
- B. Acute aluminous periostitis*
- C. Acute serous periodontitis*
- D. Acute suppurative pulpitis*
- E. Exacerbation of chronic periodontitis*

**15.** An ambulance has delivered an 8- year-old child to an admission room. An oral surgeon has made the following diagnosis: odontogenic phlegmon of the right submandibular area. What surgical approach would be advisable for open treatment of this phlegmon?

- A. Dissection in the submandibular area, parallel to the mandible*
- B. Dissection parallel to the torus mandibularis*
- C. Dissection around the mandibular angle*
- D. Dissection along the lower neck fold*
- E. Dissection in the area of pterygomandibular fold*

**16.** Mother of an 8-month-old girl came to a clinic with complaints of the child's anxiety, fussiness, high fever up to 38,5 °C, signs of alimentary canal irritation, vomiting and refusal to eat. On objective examination the child is pale, crying, presents with hyperemia, edema, gingival pain in the frontal area of the upper jaw, no erupted teeth can be detected. Make the diagnosis:

- A. Hindered tooth eruption*
- B. Acute herpetic stomatitis*
- C. Food poisoning*
- D. Hematogenous osteomyelitis of the maxilla*
- E. Odontogenic osteomyelitis of the maxilla*

17. A 7-year-old girl hit her forehead one day ago. Several hours after the sustained trauma a swelling developed in the left superciliary area. General condition of the child is unaffected. Objectively: swelling of the forehead tissues spreading towards the left eyelids; the swelling is soft, fluctuation sign is present. Make the preliminary diagnosis:

- A. *Hematoma of the left superciliary area*
- B. *Hemangioma of the right superciliary area*
- C. *Fracture of the temporal bone*
- D. *Fracture of the frontal bone*
- E. *Hematic abscess of the left superciliary area*

18. Parents of a 3-year-old child complain that the child has a neck growth that developed 3 months after the birth. Objectively: in the upper lateral neck area there is a semicircular neoplasm with limited mobility, soft elastic consistency, no skin alterations, painless on palpation. Puncture yielded puslike clear yellow substance. Make the provisional diagnosis:

- A. *Branchial cleft cyst*
- C. *Lymphangioma*
- E. *Hemangioma*
- B. *Chronic lymphadenitis*
- D. *Specific lymphadenitis*

19. Parents of a 6-year-old child complain of their child having a gradually enlarging neoplasm in the left parotid-masticatory region. Skin over the tumor is without discoloration. The tumor is painless, but when the head bends down the tumor increases in size and assumes bluish coloring. What disease can be suspected in the child?

- A. *Hemangioma*
- C. *Atheroma*
- E. *Cyst of the parotid gland*
- B. *Fibroma*
- D. *Lymphangioma*

### **Orthodontics**

1. Preventive examination of a 6-year-old child revealed temporary teeth bite. Upper and lower dental arches are trapeziformed. Upper incisors overlap lower incisors more than by 2/3. Incisors and second molars are in the same relation. There is no space between frontal teeth. Upper dental arch is bigger than lower dental arch by the cheek tubercle size. Bite abnormality is observed in the following planes:

- A. *Sagittal and vertical*
- D. *Sagittal and nasal*
- B. *Sagittal and lateral*
- E. *Sagittal and Frankfurt*
- C. *Sagittal and occlusal*

2. Preventive examination of a 9-year-old girl revealed broad bridge of nose, narrow nasal passages, half-opened mouth, problems with lip joining, elongated lower third of face. The child presents with transitional occlusion. There is vertical gap 4–5 mm large from the 53 to the 64 tooth in the frontal region. Relationship of the first permanent molars complies with Angle's



class I. The child pronounces hissing sounds indistinctly. Specify the most likely factor of occlusion deformation:

- A. *Nasal respiration disorder*
- B. *Tongue parafunction*
- C. *Tongue sucking*
- D. *Infantile swallowing*
- E. *There is no correct answer*

3. Preventive examination of a 5-year-old child revealed half-open mouth, difficult closing of lips, primary occlusion, 4 mm sagittal gap, homonymous canines and second molars. The upper dental arch is V-shaped, the lower one is trapezoid. Both dental arches in primary occlusion should have the following shape:

- A. *Semicircle*
- B. *Semiellipse*
- C. *Parabola*
- D. *Quadrangle*
- E. *Triangle*

4. An orthodontist monitors a 4-year-old child with mouth breath. The child has a history of adenotomy. Objectively: primary dentition occlusion; the upper incisors overlap the lower ones by 1/3; distal surfaces of the second temporary molars are situated in the same vertical plane. What preventive device will help the child to give up the habit of mouth breath?

- A. *Standard Schonherr's vestibular screen*
- B. *Vesibular and oral Kraus' screen*
- C. *Frankel's function regulator*
- D. *Andresen-Haupl activator*
- E. *Rudolph's appliance*

5. External examination of a 7-year-old child revealed: thickening of nose bridge, semi-open mouth, dry lips. Mouth corners are peeling. Anamnesis data: the child sleeps with open mouth. Examination of oral cavity revealed no changes. What dispensary group will this child fall into?

- A. *The second*
- B. *The first*
- C. *The third*
- D. *The fourth*
- E. *–*

6. A child is 7 years old. He has early transitional dentition. There is overcrowding of the lower front teeth: the 42 and 32 teeth erupted orally with a complete lack of space. Make a plan of treatment:

- A. *Serial consecutive extraction by Hotz method*
- B. *Extraction of the 42 and 32 teeth*
- C. *Extraction of the 41 and 31 teeth*
- D. *Extraction of the 83 and 73 teeth*
- E. *Extraction of the 84 and 74 teeth*

7. A 12-year-old patient complains about an aesthetic defect. Objectively: the lower third of face is shortened, upper frontal teeth overbite the lower teeth by 3/3 of height, exhibit oral inclination, lateral parts all along exhibit cusp-to-cusp relationship between the antagonists; Angle's class II malocclusion (joining of the upper permanent molars) is also present. Malocclusion is observed in the following planes:

- A. *In sagittal and vertical*
- B. *In transversal*
- C. *In transversal and vertical*
- D. *In vertical*
- E. *In sagittal*

**8.** Intraoral examination of a 5-year-old child revealed primary occlusion, tremas and diastemas, worn tubercles and cutting surfaces of teeth. The distal surfaces of the second lower molars are anterior to the distal surfaces of the second upper molars. This stage of primary occlusion is called:

- A. *Aging*
- B. *Stable occlusion*
- C. *Formation*
- D. *Eruption*
- E. *There is no correct answer*

**9.** A patronage nurse visited a newborn baby. Examination revealed the shortened lower part of the face, the backward-sloping chin, missing teeth, the retroposed lower jaw. What is the number of dental follicles in each jaw of a newborn baby?

- A. 18
- B. 16
- C. 14
- D. 12
- E. 10

**10.** During examination of a 5-year-old child the orthodontist revealed no wear of teeth, no tremata and diastemata, orthogenic occlusion. Which of the following symptoms in a 5-year old child is a sign of future teeth overcrowding?

- A. *Absence of tremata and diastemata*
- B. *Absence of wear of teeth*
- C. *Orthogenic occlusion*
- D. *Orthognathic bite*
- E. *Absence of mesial step in the region of second temporary molars*

**11.** Examination of a 5-year-old child revealed reverse overlap of the incisors and canines. What is the most effective way of abnormal bite prevention at this age?

- A. *Selective grinding of milk teeth tubercles*
- B. *Vestibular plate*
- C. *Myogymnastics*
- D. *Tongue frenulum plasty*
- E. *Treatment with an orthodontic appliance*

**12.** A 3,5-year-old child has symmetrical face, the middle part is predominant in proportions, swallowing is infantile, breathing is nasal. In the oral cavity the dentition corresponds with the age norms, the sagittal fissure is 3 mm, every tooth in the lateral part has its antagonist, the lower teeth touch the hard palate. Miogymnastics with Dassa orbicularis oris activator is recommended. What function is normalised by this apparatus in the given case?

- A. *Lips closure*
- B. *Breathing*
- C. *Chewing*
- D. *Swallowing*
- E. *Speech*

**13.** A visiting nurse examined a newborn child. Examination revealed that lower face part is shorter than median one, chin is retrodeviated, teeth are missing, lower jaw is retrodisplaced. What is the name of such mandible position of a newborn?

- A. *Physiological infantile retrogenia*
- B. *Mesial occlusion*
- C. *Physiological occlusion*
- D. *Distal occlusion*
- E. *Edge-to-edge occlusion*

**14.** External examination of a 7 year old child revealed: thickening of nose bridge, semi-open mouth, dry lips. Mouth corners are peeling. Anamnesis data: the child sleeps with open mouth. Examination of oral cavity revealed no changes. What dispensary group will this child fall into?

- A. *The second*                      C. *The third*                      E. *–*  
 B. *The first*                      D. *The fourth*

**15.** Parents of an 8 year old boy complain about a cosmetic defect, inability to bite off food. The child often suffers from acute viral respiratory infections. Objectively: chin skewness, mental fold is most evident. The lower lip is everted, superior central incisor lies on it, nasolabial fold is flattened. In the oral cavity: occlusion period is early exfoliation period. The upper jaw is narrowed, there is gothic palate. Frontal teeth have fan-shaped position. Sagittal fissure is 6 mm. In the lateral parts contact of homonymous teeth is present. What is the most probable cause of dentoalveolar deformity?

- A. *Pathology of upper airways*                      D. *Untimely sanitation of oral cavity*  
 B. *Missing of Caelinski ledge*                      E. *Gestational toxicosis*  
 C. *Endocrinal diseases*

**16.** A 5 year old girl with crossbite was referred to an orthodontist. Objectively: between frontal teeth there are diaereses and diastems, canine tubera have no signs of physiological wear out. Central line between incisors doesn't match. What is the doctor's tactics?

- A. *To remove unworn tubera of canines*  
 B. *To administer jaw massage*  
 C. *To make a screw plate for the upper jaw*  
 D. *To wait for autoregulation*  
 E. *To disconnect occlusion*

**17.** Prophylactic examination of a 6 year old child revealed: occlusion of temporary teeth. Both superior and inferior dental arches are trapeziform. Superior incisors overlap the inferior ones by more than 2/3. Correlation of canines and second molars is homonymous. There are no spaces between frontal teeth. Superior dental arch is larger than inferior one by the size of buccal cusp. In what planes can the occlusion deformity be defined?

- A. *Sagittal and vertical*                      D. *Sagittal and nasal*  
 B. *Sagittal and transversal*                      E. *Sagittal and Frankfort's*  
 C. *Sagittal and occlusal*

**18.** A child is 2,5 year old. The parents complain about thumb sucking during sleep. What tactics should the doctor choose?

- A. *To recommend an ulnar fixator*  
 B. *To talk with a child about harm from thumb suction*  
 C. *Medical intervention is unnecessary*  
 D. *Non-removable device for suppression of bad habit*  
 E. *Removable device for suppression of bad habit*

**19.** A 12-year-old patient complains about an aesthetic defect. Objectively: the lower third of face is shortened, upper frontal teeth overbite the lower teeth by 3/3 of height, exhibit oral inclination, lateral parts all along exhibit cusp-to-cusp relationship between the antagonists; Angle's class II malocclusion (joining of the upper permanent molars) is also present. Malocclusion is observed in the following planes:

- |                                       |                       |
|---------------------------------------|-----------------------|
| <i>A. In sagittal and vertical</i>    | <i>D. In vertical</i> |
| <i>B. In transversal</i>              | <i>E. In sagittal</i> |
| <i>C. In transversal and vertical</i> |                       |

**20.** A boy is 10 years old. His face is symmetric and proportional. He presents with mouth breath. Examination of the oral cavity revealed saddle-like form of dental arches and high arched palate. Upper first molar relationship (Angle's key to occlusion) remains intact. What is the most likely diagnosis?

- |                                      |                                       |
|--------------------------------------|---------------------------------------|
| <i>A. Narrowing of dental arches</i> | <i>D. Widening of dental arches</i>   |
| <i>B. Distal occlusion</i>           | <i>E. Elongation of dental arches</i> |
| <i>C. Mesial occlusion</i>           |                                       |

**21.** Preventive examination a 6-year-old child revealed that the child had deciduous dentition, direct incisor contact in the frontal segment, no gaps between teeth; contact of homonymous canines and molars; abrasion of masticatory tubercles of the molars. The child's condition corresponds with the following period:

- |   |                           |
|---|---------------------------|
| <i>A. Physiological wear of deciduous dentition</i> | <i>D. Mixed dentition</i> |
| <i>B. Development of deciduous dentition</i>        | <i>E. Exfoliation</i>     |
| <i>C. Stable deciduous dentition</i>                |                           |

**22.** An orthodontist monitors a 4-year-old child with mouth breath. The child has a history of adenotomy. Objectively: primary dentition occlusion; the upper incisors overlap the lower ones by 1/3; distal surfaces of the second temporary molars are situated in the same vertical plane. What preventive device will help the child to give up the habit of mouth breath?

- |  |                                    |
|--|------------------------------------|
| <i>A. Standard Schonherr's vestibular screen</i> | <i>D. Andresen-Haupl activator</i> |
| <i>B. Vestibular and oral Kraus' screen</i>      | <i>E. Rudolph's appliance</i>      |
| <i>C. Frankel's function regulator</i>           |                                    |

### **Classification of the dentognathic anomalies and deformations.**

#### **Methods of investigation of orthodontic patient.**

**1.** Parents of a 9-year-old boy complain about permanently open mouth of the child. External examination revealed elongation of the lower face part, non-closure of lips. Examination of the oral cavity revealed early mixed dentition. Relationship of the first permanent molars is neutral, vertical space is 5 mm. What is the most likely diagnosis?

- |                            |                         |
|----------------------------|-------------------------|
| <i>A. Open bite</i>        | <i>D. Deep overbite</i> |
| <i>B. Distal occlusion</i> | <i>E. Cross bite</i>    |
| <i>C. Mesial occlusion</i> |                         |

2. An 18-year-old patient complains about an aesthetic defect. Objectively: the lower teeth are set forward and overlap the upper antagonists. This symptom is typical for the following bite abnormality:

- A. *Mesial bite*                      C. *Deep bite*                      E. *Cross bite*
- B. *Distal bite*                      D. *Open bite*

3. A child was born with body weight at a rate of 3 200 g and body length at a rate of 53 cm, 9 points on Apgar score. It was the first physiological delivery. What position of child's mandible is usually observed after birth?

- A. *Physiological retrogenia*                      D. *Direct relation*
- B. *Physiological progenia*                      E. *Posterior occlusion*
- C. *Central occlusion*

4. Preventive examination of a 6-year-old child revealed temporary teeth bite. Upper and lower dental arches are trapeziformed. Upper incisors overlap lower incisors more than by 2/3. Incisors and second molars are in the same relation. There is no space between frontal teeth. Upper dental arch is bigger than lower dental arch by the cheek tubercle size. Bite abnormality is observed in the following planes:

- A. *Sagittal and vertical*                      D. *Sagittal and nasal*
- B. *Sagittal and lateral*                      E. *Sagittal and Frankfurt*
- C. *Sagittal and occlusal*

5. Preventive examination of a 9-year-old girl revealed broad bridge of nose, narrow nasal passages, half-opened mouth, problems with lip joining, elongated lower third of face. The child presents with transitional occlusion. There is vertical gap 4–5 mm large from the 53 to the 64 tooth in the frontal region. Relationship of the first permanent molars complies with Angle's class I. The child pronounces hissing sounds indistinctly. Specify the most likely factor of occlusion deformation:

- A. *Nasal respiration disorder*                      D. *Infantile swallowing*
- B. *Tongue parafunction*                      E. *There is no correct answer*
- C. *Tongue sucking*

6. A 6,5-year-old child has a gap 2,5–3 mm large between frontal teeth from canine to canine. Relationship of the first permanent molars complies with Angle's class I. Specify the severity degree of bite deformation:

- A. *I degree*    B. *II degree*    C. *III degree*    D. *IV degree*    E. *V degree*

7. A 9-year-old boy presents with face asymmetry due to the chin deviation to the left. When the third Il'ina-Marcosian diagnostic test is performed face asymmetry disappears. What is the most likely clinical form of this occlusal abnormality?

- A. *Habitual deviation of mandible*
- B. *Ankylosis of the temporomandibular joint*
- C. *Unilateral hypoplasia of mandible*
- D. *Bilateral narrowing of the maxillary dental arch*
- E. *Unilateral narrowing of the maxillary dental arch*

**8.** Analysis of a 10-year-old boy's jaw models revealed that occlusal plane of the frontal maxillary teeth was of concave form, its lateral parts were convex. Form of the alveolar process also represents deformation of dental arches. The upper jaw is of saddle-like form with abrupt narrowing in the region of premolar teeth. What type of bite is it?

- A. *Open*      B. *Distal*      C. *Deep*      D. *Mesial*      E. *Cross*

**9.** A 10-year-old girl complains of an aesthetic defect. She has a history of sucking her right thumb till the age of 7. Objectively: the height of the lower third of face is somewhat reduced. There is a 9 mm gap in sagittal direction between the upper and lower incisors, Engle's class 2. As a result of Eschler-Bittner test the girl's face appears at first better, then worse. What clinical form of occlusal anomaly is most likely?

- A. *Maxillary macrognathia and mandibular micrognathia*  
 B. *Maxillary macrognathia*  
 C. *Mandibular micrognathia*  
 D. *Maxillary prognathism with lateral compression*  
 E. *Mandibular retrognathia*

**10.** Preventive examination of a 5-year-old child reveals the infantile swallowing. The bad habit of thrusting the tongue between the teeth may cause the following complication:

- A. *Incomplete eruption of the front teeth*  
 B. *Broadenning of the upper dental arch*  
 C. *Broadening of the lower dental arch*  
 D. *Narrowing of the lower dental arch*  
 E. *Narrowing of the upper dental arch*

**11.** A 6,5-year-old child has a gap 2,5–3 mm large between frontal teeth from canine to canine. Relationship of the first permanent molars complies with Angle's class I. Specify the severity degree of bite deformation:

- A. *I degree*      B. *II degree*      C. *III degree*      D. *IV degree*      E. *V degree*

**12.** An 8-year-old boy complains of improper arrangement of teeth. Examination at an orthodontic clinic revealed broad, tight, low-attached upper lip frenulum. Broad frenulum and its low attachment may cause:

- A. *Diastema*      D. *Narrowing of the upper dentition*  
 B. *Shortening of the upper dentition*      E. *Protrusion of the upper front teeth*  
 C. *Elongation of the upper dentition*

**13.** Preventive examination of a 5-year-old child revealed half-open mouth, difficult closing of lips, primary occlusion, 4 mm sagittal gap, homonymous canines and second molars. The upper dental arch is V-shaped, the lower one is trapezoid. Both dental arches in primary occlusion should have the following shape:

- A. *Semicircle*      D. *Quadrangle*  
 B. *Semiellipse*      E. *Triangle*  
 C. *Parabola*

**14.** External examination of a 7-year-old child revealed: thickening of nose bridge, semi-open mouth, dry lips. Mouth corners are peeling. Anamnesis data: the child sleeps with open mouth. Examination of oral cavity revealed no changes. What dispensary group will this child fall into?

A. *The second*    B. *The first*    C. *The third*    D. *The fourth*    E. –

**15.** A 12-year-old patient complains about an aesthetic defect. Objectively: the lower third of face is shortened, upper frontal teeth overbite the lower teeth by  $\frac{3}{3}$  of height, exhibit oral inclination, lateral parts all along exhibit cusp-to-cusp relationship between the antagonists; Angle's class II malocclusion (joining of the upper permanent molars) is also present. Malocclusion is observed in the following planes:

A. *In sagittal and vertical*    D. *In vertical*

B. *In transversal*    E. *In sagittal*

C. *In transversal and vertical*

**16.** A boy is 10 years old. His face is symmetric and proportional. He presents with mouth breath. Examination of the oral cavity revealed saddle-like shape of dental arches and high arched palate. Upper first molar relationship (Angle's key to occlusion) remains intact. What is the most likely diagnosis?

A. *Narrowing of dental arches*    D. *Widening of dental arches*

B. *Distal occlusion*    E. *Elongation of dental arches*

C. *Mesial occlusion*

**17.** A 9-year-old boy presents with face asymmetry due to the chin displacement to the left. When the third Il'ina-Marcosian diagnostic test is performed, face asymmetry disappears. What is the most likely clinical form of this occlusal abnormality?

A. *Habitual displacement of mandible*

B. *Ankylosis of the temporomandibular joint*

C. *Unilateral hypoplasia of mandible*

D. *Bilateral narrowing of the maxillary dental arch*

E. *Unilateral narrowing of the maxillary dental arch*

**18.** Intraoral examination of a 5-year-old child revealed primary occlusion, tremas and diastemas, worn tubercles and cutting surfaces of teeth. The distal surfaces of the second lower molars are anterior to the distal surfaces of the second upper molars. This stage of primary occlusion is called:

A. *Aging*    C. *Formation*    E. *There is no correct answer*

B. *Stable occlusion*    D. *Eruption*

**19.** Parents of a 6,5-year-old boy consulted an orthodontist about no contact between the front teeth. The child has a bad habit of sucking his tongue. Objectively: there is a symptom of multiple pits in his chin when the lips are closed, speech disturbance, between the front teeth there is a vertical gap up to 8 mm. Specify the occlusion anomaly:

A. *Open bite*    C. *Distal occlusion*    E. *Overbite*

B. *Cross-bite*    D. *Mesial bite*

**20.** A patronage nurse visited a newborn baby. Examination revealed the shortened lower part of the face, the backward-sloping chin, missing teeth, the retroposed lower jaw. What is the number of dental follicles in each jaw of a newborn baby?

- A. 18                      B. 16                      C. 14                      D. 12                      E. 10

**21.** During examination of a 5-year-old child the orthodontist revealed no wear of teeth, no tremata and diastemata, orthogenic occlusion. Which of the following symptoms in a 5-year old child is a sign of future teeth overcrowding?

- A. *Absence of tremata and diastemata*  
B. *Absence of wear of teeth*  
C. *Orthogenic occlusion*  
D. *Orthognathic bite*  
E. *Absence of mesial step in the region of second temporary molars*

**22.** A 7,5-year-old child has square dental arches of both jaws, the relationship between the canines and the first permanent molars corresponds with Angle's class I. Specify the dental anomaly according to Kalvelis classification:

- A. *Anomaly of the dental arch shape*  
B. *Anomaly of dental arch development*  
C. *Anomalies of individual teeth*  
D. *Malocclusion*  
E. *Anomalies of jaw size*

**23.** A 12-year-old child has half retention of the 25 tooth, the dental arch lacks space for 1/3 of the crown. The upper incisors overlap the lower ones by 2/3, the relationship of the first permanent molars on the left corresponds with Angle's class 2. Rational design of orthodontic appliance for the upper jaw should include:

- A. *Unilateral screw for the 25 tooth and bite plate*  
B. *Bilateral expansion screw*  
C. *Radial symmetric screw*  
D. *Radial asymmetric screw*  
E. *Lateral inclined plane*

**24.** A 9-year-old child has a symmetrical maxillary diastema with crown divergence. The relationship of the lateral teeth is neutral. In the anterior segment the depth of incisal overbite is 1/3 of the crown height. What appliance can be used for simultaneous treatment of diastema and crown divergence?

- A. *Maxillary plate with spring arms*  
B. *Maxillary plate with protraction springs*  
C. *Standard edgewise technique*  
D. *Bracket system with Andrew's straight-wire*  
E. *Maxillary plate with vestibular arch*



**25.** Parents of a 10-year-old boy consulted an orthodontist about misalignment of the 21 tooth. Objectively: the 21 tooth is in a vestibular position, there is enough space for it in the dental arch. What additional methods of examination should be applied to specify the treatment plan?

- |                                     |                            |
|-------------------------------------|----------------------------|
| <i>A. X-ray</i>                     | <i>D. Paralleling</i>      |
| <i>B. Pont's index measuring</i>    | <i>E. Masticaciography</i> |
| <i>C. Korkhaus' index measuring</i> |                            |

**26.** In a 7-year-old child the right mandibular molars overlap the maxillary molars, there are no other occlusion abnormalities. Size and shape of the lower dental arch are normal. Specify the appliance for the treatment of this abnormality:

- A. Upper-jaw appliance with a sector expansion screw*
- B. Upper-jaw appliance with a middle expansion screw*
- C. Upper-jaw appliance with a right guide plane*
- D. Upper-jaw appliance with a left guide plane*
- E. Angle's coil spring*

**27.** Parents of a 5-year-old child consulted an orthodontist about mispronunciation of sounds by the child. Objectively: the child's face is unremarkable. The patient has deciduous dentition. There are 1–1,5 mm gaps in the frontal segment from 53 to 63. Occlusion in the sagittal and transversal planes is normal. What type of Frankel's functional regulator is used to treat the above-described malocclusion?

- |                    |                   |             |
|--------------------|-------------------|-------------|
| <i>A. Type IV</i>  | <i>C. Type II</i> | <i>E. —</i> |
| <i>B. Type III</i> | <i>D. Type I</i>  |             |

**28.** Clinical examination of a 10-year-old girl's oral cavity revealed an 11 mm gap in a sagittal plane, the contact of the lateral maxillary teeth with the front mandibular teeth, mesiobuccal cusps of the 16 and 26 tooth located on the cusps of the 35 and 45 tooth. What additional examination method will allow to make a definitive diagnosis and specify clinical form of malocclusion?

- A. Profile teleroentgenography*
- B. Orthopantomography*
- C. Anthropometric measuring of jaw models*
- D. Determining morphological facial index*
- E. Clinical functional tests*

**29.** An 11-year-old boy had been diagnosed with a 6 mm wide diastema of type 2 (by Khoroshilkina classification). To normalize the incisor position, the Korkhaus appliance was used. What kind of movement is facilitated by this appliance?

- |                           |                     |                  |
|---------------------------|---------------------|------------------|
| <i>A. Bodily movement</i> | <i>C. Intrusion</i> | <i>E. Torque</i> |
| <i>B. Rotation</i>        | <i>D. Extrusion</i> |                  |

**30.** An 11-year-old girl complains of a cosmetic defect: the placement of the 23rd tooth is incorrect. Objectively: the face is symmetrical. The 24th tooth has buccal placement above the occlusion area. The space between the 22nd and 24th is 3 mm. What additional examination is required?

- A. *All of the methods named below*
- B. *Pont analysis*
- C. *X-ray examination*
- D. *Measuring the length of the dentition*
- E. *Korkhaus analysis*

**31.** A 10-year-old girl complains of an aesthetic flaw. The anamnesis states, that she had been sucking her right thumb up to the age of 7. Objectively: the face lower third is somewhat reduced. The sagittal fissure between the upper and lower incisors, is 9 mm wide, class 2 according to the Angle classification. Eshler-Bittner test leads to initial temporary improvement of the girl's face, followed by renewed deterioration. What clinical malocclusion is the most probable in this case?

- A. *Maxillary macrognathia and mandibular micrognathia*
- B. *Maxillary macrognathia*
- C. *Mandibular micrognathia*
- D. *Maxillary prognathism with lateral compression*
- E. *Mandibular retrognathia*

**32.** A child is 13 years old. The third upper tooth is fully cut, but situated slightly above the occlusion surface. What kind of abnormal placement is it?

- A. *Supraversion*
- B. *Torsoversion*
- C. *Vestibular*
- D. *Infraversion*
- E. *Oral*

**33.** During examination of the 11-year-old child's oral cavity the 23rd tooth vestibular position was detected. Correlation of the 16th and 46th is Angle class 1, and 26th and 36th is Angle class 2. The width of the 23rd crown is 8 mm. The dentition lacks 4 mm to place the 23rd properly. Front teeth occlusion is normal. Choose the optimal treatment approach.

- A. *Move the upper lateral teeth on the right side in distal direction, than move the canine into the correct place*
- B. *Extract the canine; move the 24th and 25th teeth to replace the 23rd*
- C. *Widen the upper and lower dentitions, and move the canine into the correct place*
- D. *Widen the upper dentition, and move the canine into the correct place*
- E. *Extract the first premolar, and move the canine into the correct place*

**34.** A 3,5-year-old child has symmetrical face, the middle part is predominant in proportions, swallowing is infantile, breathing is nasal. In the oral cavity the dentition corresponds with the age norms, the sagittal fissure is 3 mm, every tooth in the lateral part has its antagonist, the lower teeth touch the hard palate. Miogymnastics with Dassa orbicularis oris activator is recommended. What function is normalised by this apparatus in the given case?

- A. *Lips closure*
- B. *Breathing*
- C. *Chewing*
- D. *Swallowing*
- E. *Speech*

**35.** An 18-year-old patient with complaint of large diastem has made an appointment with prosthodontics specialist. Objectively: there is full lateral displacement of central incisors due to absence of the 12th and 22nd teeth. What instrument is the most advisable for moving the central incisors closer together?

- A. *Korkhaus appliance*
- B. *Vasylenko appliance*
- C. *Simple cotton ligature*
- D. *Kalvelis appliance*
- E. *Begg appliance*

**36.** A 16-year-old female patient complains of a deformation and restricted mouth opening since birth. Objectively: the face is symmetrical, disproportionate, there is a bird-like face symptom. The mouth opens up to 1 cm. The patient has an occlusal abnormality, namely deep incisal overbite. What pathology is found in this patient?

- A. *Micrognathia with congenital ankylosis*
- B. *Micrognathia with acquired ankylosis*
- C. *Maxillary protraction*
- D. *Prognathism*
- E. *Mandibular protraction*

**37.** To perform a differentiated diagnostics of the lower jaw displacement a patient was asked to open his mouth as wide as possible, and then the lateral displacement of the lower jaw and face asymmetry were measured. What clinical test is it?

- A. *Ilyina-Markosyan clinical functional test 3*
- B. *Ilyina-Markosyan clinical functional test 1*
- C. *Ilyina-Markosyan clinical functional test 2*
- D. *Ilyina-Markosyan clinical functional test 4*
- E. *Eschler-Bittner clinical diagnostic test*

**38.** What measurements are necessary to determine the width of dental arch according to the Pont's method of analysis?

- A. *Crown width of four upper incisors*
- B. *Crown width of upper central incisors*
- C. *Crown width of six upper front teeth*
- D. *Crown width of upper central incisors and the first premolars*
- E. *Size of dentition frontal segment*

**39.** Parents of an 8-year-old child have made an appointment with an orthodontist. There are complaints of their child having traumas of oral mucosa. Objectively: decreased height of the face lower part, everted lower lip, deep labiomental furrow, milk occlusion. The upper incisors fully cover the lower ones; cutting surface of the lower incisors make contact with the anterior third of the palate. Mesiodistal ratio of the canines and the first permanent molars is normal. Grouping of the upper and lower front teeth is dissimilar. Make the diagnosis according to the Kalvelis classification.

- A. *Deep traumatic overbite*
- B. *Deep incisor overbite*
- C. *Deep neutral occlusion*
- D. *Deep prognatic (roof-shaped) occlusion*
- E. *—*

**40.** Preventive examination of a 5-year-old child revealed a habit of lower lip biting. What malocclusion may develop if the child keeps this habit?

- A. *Anterior bite*                      C. *Open bite*                      E. *Cross-bite*
- B. *Prognathic bite*                      D. *Deep overbite*

**41.** Parents of an 8-year-old girl are concerned that she is chewing food too slowly. Objectively: it is a period of transitional dentition. The first permanent molars has neutral relationship; sagittal fissure is 2 mm wide. The upper front teeth cover the lower ones by 2/3. Name the pathology.

- A. *Deepening of incisor overbite*
- B. *Widening of the sagittal fissure*
- C. *Tooth-alveolar lengthening of the front teeth*
- D. *Tooth-alveolar shortening of the lateral teeth*
- E. *Decrease of the lower face height*

**42.** A 12 year old girl complained about a crown defect in the frontal part of her upper jaw. Anamnesis data: the tooth was filled more than once but the fillings fell out. Objectively: the 12 tooth is filled. There is IV class defect according to Black's classification. Devitalization has never been performed, percussion of the 12 tooth is painless. What orthopaedic construction should be applied in this case?

- A. *Circumpulpal pin inlay*                      D. *Ceramic crown*
- B. *Metal-ceramic crown*                      E. *Metal crown*
- C. *Halfcrown*

**43.** A teenager applied to an orthodontist complaining about tooth malposition. Objectively: the face is without peculiarities. Occlusion of permanent teeth is present. There are no abnormalities of jaw correlation in three planes. The 23 tooth is vestibularly over the occlusive plane; the space in the dental arch is less than 1/3 of crown size. How is it possible to make room for the malpositioned 23 tooth?

- A. *To remove the 24 tooth*                      D. *To remove the 23 tooth*
- B. *To enlarge transversal jaw dimensions*                      E. *To enlarge vertical dimensions*
- C. *To enlarge sagittal jaw dimensions*

**44.** A visiting nurse examined a newborn child. Examination revealed that lower face part is shorter than median one, chin is retrodeviated, teeth are missing, lower jaw is retrodisplaced. What is the name of such mandible position of a newborn?

- A. *Physiological infantile retrogenia*                      D. *Distal occlusion*
- B. *Mesial occlusion*                      E. *Edge-to-edge occlusion*
- C. *Physiological occlusion*

**45.** External examination of a 7 year old child revealed: thickening of nose bridge, semi-open mouth, dry lips. Mouth corners are peeling. Anamnesis

data: the child sleeps with open mouth. Examination of oral cavity revealed no changes. What dispensary group will this child fall into?

- A. *The second*                      C. *The third*                      E. –
- B. *The first*                      D. *The fourth*

**46.** A 14 year old patient applied to an orthodontist. Objective examination revealed that on the site of the second incisor a canine tooth had cut out, and on the site of the canine - the second incisor. The same pathology has also the patient's father. Make a diagnosis:

- A. *Transposition of lateral incisor and canine*
- B. *Distal position of lateral incisor*
- C. *Palatine position of lateral incisor*
- D. *Mesial position*
- E. *Superocclusion of incisor and infraocclusion of canine*

**47.** Parents of an 8 year old boy complain about a cosmetic defect, inability to bite off food. The child often suffers from acute viral respiratory infections. Objectively: chin skewness, mental fold is most evident. The lower lip is everted, superior central incisor lies on it, nasolabial fold is flattened. In the oral cavity: occlusion period is early exfoliation period. The upper jaw is narrowed, there is gothic palate. Frontal teeth have fan-shaped position. Sagittal fissure is 6 mm. In the lateral parts contact of homonymous teeth is present. What is the most probable cause of dentoalveolar deformity?

- A. *Pathology of upper airways*                      D. *Untimely sanitation of oral cavity*
- B. *Missing of Caelinski ledge*                      E. *Gestational toxicosis*
- C. *Endocrinal diseases*

**48.** A 5 year old girl with crossbite was referred to an orthodontist. Objectively: between frontal teeth there are diaereses and diastems, canine tubera have no signs of physiological wear out. Central line between incisors doesn't match. What is the doctor's tactics?

- A. *To remove unworn tubera of canines*                      D. *To wait for autoregulation*
- B. *To administer jaw massage*                      E. *To disconnect occlusion*
- C. *To make a screw plate for the upper jaw*

**49.** Prophylactic examination of a 6 year old child revealed: occlusion of temporary teeth. Both superior and inferior dental arches are trapeziform. Superior incisors overlap the inferior ones by more than 2/3. Correlation of canines and second molars is homonymous. There are no spaces between frontal teeth. Superior dental arch is larger than inferior one by the size of buccal cusp. In what planes can the occlusion deformity be defined?

- A. *Sagittal and vertical*                      D. *Sagittal and nasal*
- B. *Sagittal and transversal*                      E. *Sagittal and Frankfort's*
- C. *Sagittal and occlusal*

**50.** A child is 2,5 year old. The parents complain about thumb sucking during sleep. What tactics should the doctor choose?

- A. *To recommend an ulnar fixator*
- B. *To talk with a child about harm from thumb suction*
- C. *Medical intervention is unnecessary*
- D. *Non-removable device for suppression of bad habit*
- E. *Removable device for suppression of bad habit*

**51.** An 11 year old girl has adentia, the 35 tooth is missing, it was proved roentgenologically. Between the 34 and 33 teeth as well as between the 34 and 36 teeth there are diastemes, the 34 tooth is turned by 30° relative to its glossobuccal direction. What abnormal position does the 34 tooth have?

- A. *Tortoooclusion (rotation of teeth) and distal*
- B. *Distal*
- C. *Mesial*
- D. *Vestibular*
- E. *Oral*

**52.** Analysis of a 10-year-old boy's jaw models revealed that occlusal plane of the frontal maxillary teeth was of concave form, its lateral parts were convex. Form of the alveolar process also represents deformation of dental arches. The upper jaw is of saddle-like form with abrupt narrowing in the region of premolar teeth. What type of bite is it?

- A. *Open*
- B. *Distal*
- C. *Deep*
- D. *Mesial*
- E. *Cross*

**53.** Examination of a 13-year-old patient allowed to make a final diagnosis: vestibular position of the 13 and 23 teeth with the total space deficit, narrowing of maxillary dental arch, torsion of the 12 and 22 tooth. To eliminate this pathology it was suggested to widen the dental arch and to extract some teeth. What teeth have orthodontic indication for their extraction?

- A. *First premolars*
- B. *Canines*
- C. *Second incisors*
- D. *Second premolars*
- E. *First molars*

**54.** A 12-year-old patient complains about an aesthetic defect. Objectively: the lower third of face is shortened, upper frontal teeth overbite the lower teeth by 3/3 of height, exhibit oral inclination, lateral parts all along exhibit cusp-to- cusp relationship between the antagonists; Angle's class II malocclusion (joining of the upper permanent molars) is also present. Malocclusion is observed in the following planes:

- A. *In sagittal and vertical*
- B. *In transversal*
- C. *In transversal and vertical*
- D. *In vertical*
- E. *In sagittal*

**55.** A 12-year-old patient presents with abnormal position of the upper jaw canine. The 13 tooth is in the vestibular position, above the occlusal plane. Space between the 14 and the 12 tooth is 6,5 mm. Choose a rational treatment method:

- A. *Instrumental*
- B. *Surgical and instrumental*
- C. *Surgical and physiotherapeutic*
- D. *Instrumental and myogymnastics*
- E. *Surgical and myogymnastics*

**56.** A boy is 10 years old. His face is symmetric and proportional. He presents with mouth breath. Examination of the oral cavity revealed saddle-like form of dental arches and high arched palate. Upper first molar relationship (Angle's key to occlusion) remains intact. What is the most likely diagnosis?

- A. *Narrowing of dental arches*
- B. *Distal occlusion*
- C. *Mesial occlusion*
- D. *Widening of dental arches*
- E. *Elongation of dental arches*

**57.** A 9-year-old boy presents with face asymmetry due to the chin deviation to the left. When the third Il'ina- Marcosian diagnostic test is performed face asymmetry disappears. What is the most likely clinical form of this occlusal anomaly?

- A. *Habitual deviation of mandible*
- B. *Ankylosis of the temporomandibular joint*
- C. *Unilateral hypoplasia of mandible*
- D. *Bilateral narrowing of the maxillary dental arch*
- E. *Unilateral narrowing of the maxillary dental arch*

**58.** Preventive examination a 6-year-old child revealed that the child had deciduous dentition, direct incisor contact in the frontal segment, no gaps between teeth; contact of homonymous canines and molars; abrasion of masticatory tubercles of the molars. The child's condition corresponds with the following period:

- A. *Physiological wear of deciduous dentition*
- B. *Development of deciduous dentition*
- C. *Stable deciduous dentition*
- D. *Mixed dentition*
- E. *Exfoliation*

**59.** An orthodontist monitors a 4-year-old child with mouth breath. The child has a history of adenotomy. Objectively: primary dentition occlusion; the upper incisors overlap the lower ones by 1/3; distal surfaces of the second temporary molars are situated in the same vertical plane. What preventive device will help the child to give up the habit of mouth breath?

- A. *Standard Schonherr's vestibular screen*
- B. *Vesibular and oral Kraus' screen*
- C. *Frankel's function regulator*
- D. *Andresen-Haupl activator*
- E. *Rudolph's appliance*

**60.** Parents of a 12-year-old child consulted an orthodontist about improper position of the child's upper teeth. Objectively: the face is narrow, elongated; the developing occlusion is present (temporary second molars). The 13 and 23 teeth are located beyond the dental arch, they deviate to the lips above the occlusal plane, there is a 2,5 mm gap between the 12 and 14 teeth, and a 1,5 mm gap between the 22 and 24 ones, 45° rotation the 33 and 43 teeth is present. Choose the most rational method of treatment:

- A. *Extraction of the premolars and relocation of the canines*
- B. *Expansion of dental arches in the region of canine apices*
- C. *Extraction of temporary premolars and expansion of dental arches*
- D. *Compact osteotomy and expansion of dental arches*
- E. *All the answers are wrong*

**61.** A 16-year-old female patient complains of a deformation and restricted mouth opening since birth. Objectively: the face is symmetrical, disproportionate, there is a bird-like face symptom. The mouth opens up to 1 cm. The patient has an occlusal abnormality, namely deep incisal overbite. What pathology is found in this patient?

- A. *Micrognathia with congenital ankylosis*
- B. *Micrognathia with acquired ankylosis*
- C. *Maxillary protraction*
- D. *Prognathism*
- E. *Mandibular protraction*

**62.** Preventive examination of a 5-year-old child revealed a habit of lower lip biting. What malocclusion may develop if the child keeps this habit?

- A. *Anterior bite*
- B. *Prognathic bite*
- C. *Open bite*
- D. *Deep overbite*
- E. *Cross-bite*

**Orthodontic appliances. Adaptation to the orthodontic appliance.  
Orthodontic force. Biomorphological changes of maxillofacial system  
under the influence of orthodontic appliances**

**1.** A 12-year-old female patient was diagnosed with open bite and dentoalveolar elongation of lateral part of mandible. What construction of apparatus is required?

- A. *Upper jaw appliance with occlusal rest seats*
- B. *Extraoral face bow*
- C. *Angle's sliding face bow*
- D. *Herbst appliance*
- E. *Upper jaw appliance with a face bow*

**2.** Examination of a 9-year-old child revealed protrudent chin, the lower lip overlapping the upper lip. There are diastemas and gaps between the lower incisors, the lower incisors overlap the upper ones by 2/3 of crown height. Sagittal fissure is 3 mm. Specify the treatment tactics:

- A. *Brueckl's appliance*
- B. *Bynin's guard*
- C. *Schwartz' guard*
- D. *Angle's sliding appliance*
- E. *Myogymnastics complex*

**3.** A 17-year-old patient consulted an orthodontist about improper position of an upper canine. Objectively: permanent occlusion, class I Angle's relationship of the first molars, the 13 tooth has vestibular position above the occlusal line, there is a 6,5 mm gap between the 14 and 12 teeth. What period of orthodontic treatment will reduce the time of lidase phonophoresis therapy?

- A. *Active period*
- B. *Retention period*
- C. *Preparatory period*
- D. *Passive period*

**4.** An 18-year-old patient presented to the orthopedic department with complaint of a large diastema. Objectively: bodily lateral movement of central incisors induced by the missing 12, 22 teeth. What is the optimal appliance for moving the central incisors together?

- A. *Korkhaus apparatus*
- B. *Vasilenko apparatus*
- C. *Cotton ligature*
- D. *Kalvelis apparatus*
- E. *Begg appliance*



5. A 7-year-old child has protruding chin, the lower lip overlaps the upper one. There are diastemas and tremas between the lower incisors, the lower incisors overlap the upper incisors by  $\frac{2}{3}$  of the crown height. First permanent molars demonstrate Angle's class III relation. Sagittal gap is 3 mm. The correct doctor's tactics will be to:

- A. *Use Bruckl's appliance*
- B. *Recommend a complex of myogymnastic exercises*
- C. *Use Angle's apparatus*
- D. *Use Bynin appliance*
- E. *Use Schwartz appliance*

6. An 11-year-old boy had been diagnosed with a 6 mm wide diastema of type 2 (by Khoroshilkina EI. classification). To normalize the incisor position, the Korkhaus appliance was used. What kind of movement is facilitated by this appliance?

- A. *Bodily movement*
- B. *Rotation*
- C. *Intrusion*
- D. *Extrusion*
- E. *Torque*

7. An 18-year-old patient with complaint of large diastem has made an appointment with prosthodontics specialist. Objectively: there is full lateral displacement of central incisors due to absence of the 12th and 22nd teeth. What instrument is the most advisable for moving the central incisors closer together?

- A. *Korkhaus appliance*
- B. *Vasylenko appliance*
- C. *Simple cotton ligature*
- D. *Kalvelis appliance*
- E. *Begg appliance*

8. An orthodontist monitors a 4-year-old child with mouth breath. The child has a history of adenotomy. Objectively: primary dentition occlusion; the upper incisors overlap the lower ones by  $\frac{1}{3}$ ; distal surfaces of the second temporary molars are situated in the same vertical plane. What preventive device will help the child to give up the habit of mouth breath?

- A. *Standard Schonherr's vestibular screen*
- B. *Vesibular and oral Kraus' screen*
- C. *Frankel's function regulator*
- D. *Andresen-Haupl activator*
- E. *Rudolph's appliance*

### **Peculiarities of local and general condition of an organism when different types of malocclusion. Planning of the orthodontic treatment**

1. A 10-year-old boy consulted a dentist about pain in the palate during eating. Objectively: the lower third of his face is shortened, mouth opening is not limited. By joining the teeth the cutting edge of inferior incisors contacts with the mucous membrane of palate. Mucous membrane in the contact point is hyperemic, slightly edematic. Lateral teeth exhibit Angle's class I malocclusion. What is the most appropriate plan of treatment of the lower jaw?

- A. *To impact frontal part*
- B. *To impact lateral parts*
- C. *To widen the lower jaw*
- D. *To protract frontal part*
- E. *To protract lateral parts*

2. A 12-year-old female patient was diagnosed with open bite and dentoalveolar elongation of lateral part of mandible. What construction of apparatus is required?

- A. *Upper jaw appliance with occlusal rest seats*
- B. *Extraoral face bow*
- C. *Angle's sliding face bow*
- D. *Herbst appliance*
- E. *Upper jaw appliance with a face bow*

3. Examination of a 9-year-old child revealed protrudent chin, the lower lip overlapping the upper lip. There are diastemas and tremas between the lower incisors, the lower incisors overlap the upper ones by 2/3 of crown height. Sagittal fissure is 3 mm. Specify the treatment tactics:

- A. *Brueckl's appliance*
- B. *Bynin's guard*
- C. *Schwartz' guard*
- D. *Angle's sliding appliance*
- E. *Myogymnastics complex*

4. A 17-year-old patient consulted an orthodontist about improper position of an upper canine. Objectively: permanent occlusion, class I Angle's relationship of the first molars, the 13 tooth has vestibular position above the occlusal line, there is a 6,5 mm gap between the 14 and 12 teeth. What period of orthodontic treatment will reduce the time of lidase phonophoresis therapy?

- A. *Active period*
- B. *Retention period*
- C. *Preparatory period*
- D. *Passive period*

5. An 18-year-old patient presented to the orthopedic department with complaint of a large diastema. Objectively: bodily lateral movement of central incisors induced by the missing 12, 22 teeth. What is the optimal appliance for moving the central incisors together?

- A. *Korkhaus apparatus*
- B. *Vasilenko apparatus*
- C. *Cotton ligature*
- D. *Kalvelis apparatus*
- E. *Begg appliance*

6. An 8-year-old child is found to have convex faciel profile, forced closing of lips, sagittal gap of 7 mm. Eschler-Bittner test produces some face improvement. This abnormality can be eliminated by means of Frankel type regulator. What is the mechanism of action of this device?

- A. *Normalization of labial, buccal and lingual pressure as well as of mandible position*
- B. *Inhibition of maxilla growth in the sagittal direction*
- C. *Maxillary expansion by means of a screw*
- D. *Normalization of mandible position and growth by means of intermandibular traction*
- E. *Normalization of upper front teeth position by means of a vestibular bar.*

7. A 7-year-old child has protruding chin, the lower lip overlaps the upper one. There are diastemas and tremas between the lower incisors, the lower

incisors overlap the upper incisors by  $\frac{2}{3}$  of the crown height. First permanent molars demonstrate Angle's class III relation. Sagittal gap is 3 mm. The correct doctor's tactics will be to:

- A. *Use Bruckl's appliance*
- B. *Recommend a complex of myogymnastic exercises*
- C. *Use Angle's apparatus*
- D. *Use Bynin appliance*
- E. *Use Schwartz appliance*

**8.** A child is 7 years old. He has early transitional dentition. There is overcrowding of the lower front teeth: the 42 and 32 teeth erupted orally with a complete lack of space. Make a plan of treatment:

- A. *Serial consecutive extraction by Hotz method*
- B. *Extraction of the 42 and 32 teeth*
- C. *Extraction of the 41 and 31 teeth*
- D. *Extraction of the 83 and 73 teeth*
- E. *Extraction of the 84 and 74 teeth*

**9.** A patient is 12 years old. He has been undergoing orthodontic treatment for pseudo prognathism with Angle's fixed appliance for 10 months. What is the optimal duration of the retentive period?

- A. *20 months*
- B. *10 months*
- C. *6 months*
- D. *3 months*
- E. *12 months*

**10.** Parents of a 6-year-old girl consulted an orthodontist about protrusion of the lower jaw. The child looks like his father. Objectively: the child has primary bite, there are diastemata and tremata on both jaws, reverse incisal overlap of front teeth, the sagittal gap is up to 3 mm, the lateral parts are characterized by mesio-occlusion. Ilyina-Markosyan test for the distal displacement of mandible is negative. What principle of treatment will be most effective?

- A. *To delay the growth of mandible in sagittal direction*
- B. *To stimulate the growth of maxilla in sagittal direction*
- C. *The treatment is not required*
- D. *No to start treatment until the end of transitional dentition*
- E. *To start orthodontic treatment after the second dentition is completed*

**11.** Examination of a 5-year-old child revealed reverse overlap of the incisors and canines. What is the most effective way of abnormal bite prevention at this age?

- A. *Selective grinding of milk teeth tubercles*
- B. *Vestibular plate*
- C. *Myogymnastics*
- D. *Tongue frenulum plasty*
- E. *Treatment with an orthodontic appliance*

**12.** A 12-year-old child has half retention of the 25 tooth, the dental arch lacks space for  $\frac{1}{3}$  of the crown. The upper incisors overlap the lower ones by  $\frac{2}{3}$ , the relationship of the first permanent molars on the left corresponds

with Angle's class 2. Rational design of orthodontic appliance for the upper jaw should include:

- A. *Unilateral screw for the 25 tooth and bite plate*
- B. *Bilateral expansion screw*
- C. *Radial symmetric screw*
- D. *Radial asymmetric screw*
- E. *Lateral inclined plane*

**13.** A 9-year-old child has a symmetrical maxillary diastema with crown divergence. The relationship of the lateral teeth is neutral. In the anterior segment the depth of incisal overbite is 1/3 of the crown height. What appliance can be used for simultaneous treatment of diastema and crown divergence?

- A. *Maxillary plate with spring arms*
- B. *Maxillary plate with protraction springs*
- C. *Standard edgewise technique*
- D. *Bracket system with Andrew's straight-wire*
- E. *Maxillary plate with vestibular arch*

**14.** In a 7-year-old child the right mandibular molars overlap the maxillary molars, there are no other occlusion abnormalities. Size and shape of the lower dental arch are normal. Specify the appliance for the treatment of this abnormality:

- A. *Upper-jaw appliance with a sector expansion screw*
- B. *Upper-jaw appliance with a middle expansion screw*
- C. *Upper-jaw appliance with a right guide plane*
- D. *Upper-jaw appliance with a left guide plane*
- E. *Angle's coil spring*

**15.** Parents of a 5-year-old child consulted an orthodontist about mispronunciation of sounds by the child. Objectively: the child's face is unremarkable. The patient has deciduous dentition. There are 1–1,5 mm gaps in the frontal segment from 53 to 63. Occlusion in the sagittal and transversal planes is normal. What type of Frankel's functional regulator is used to treat the above-described malocclusion?

- A. *Type IV*
- B. *Type III*
- C. *Type II*
- D. *Type I*

**16.** During examination of the 11-year-old child's oral cavity the 23rd tooth vestibular position was detected. Correlation of the 16th and 46th is Angle class 1, and 26th and 36th is Angle class 2. The width of the 23rd crown is 8 mm. The dentition lacks 4 mm to place the 23rd properly. Front teeth occlusion is normal. Choose the optimal treatment approach.

- A. *Move the upper lateral teeth on the right side in distal direction, than move the canine into the correct place*
- B. *Extract the canine; move the 24th and 25th teeth to replace the 23rd*
- C. *Widen the upper and lower dentitions, and move the canine into the correct place*
- D. *Widen the upper dentition, and move the canine into the correct place*
- E. *Extract the first premolar, and move the canine into the correct place*

**17.** A 3,5-year-old child has symmetrical face, the middle part is predominant in proportions, swallowing is infantile, breathing is nasal. In the oral cavity the dentition corresponds with the age norms, the sagittal fissure is 3 mm, every tooth in the lateral part has its antagonist, the lower teeth touch the hard palate. Miogymnastics with Dassa orbicularis oris activator is recommended. What function is normalised by this apparatus in the given case?

- A. *Lips closure*                      C. *Chewing*                      E. *Speech*
- B. *Breathing*                      D. *Swallowing*

**18.** An 18-year-old patient with complaint of large diastema has made an appointment with prosthodontics specialist. Objectively: there is full lateral displacement of central incisors due to absence of the 12th and 22nd teeth. What instrument is the most advisable for moving the central incisors closer together?

- A. *Korkhaus appliance*                      D. *Kalvelis appliance*
- B. *Vasylenko appliance*                      E. *Begg appliance*
- C. *Simple cotton ligature*

**19.** A teenager applied to an orthodontist complaining about tooth malposition. Objectively: the face is without peculiarities. Occlusion of permanent teeth is present. There are no abnormalities of jaw correlation in three planes. The 23 tooth is vestibularly over the occlusive plane; the space in the dental arch is less than 1/3 of crown size. How is it possible to make room for the malpositioned 23 tooth?

- A. *To remove the 24 tooth*                      D. *To remove the 23 tooth*
- B. *To enlarge transversal jaw dimensions*                      E. *To enlarge vertical dimensions*
- C. *To enlarge sagittal jaw dimensions*

**20.** Examination of a 13-year-old patient allowed to make a final diagnosis: vestibular position of the 13 and 23 teeth with the total space deficit, narrowing of maxillary dental arch, torsion of the 12 and 22 tooth. To eliminate this pathology it was suggested to widen the dental arch and to extract some teeth. What teeth have orthodontic indication for their extraction?

- A. *First premolars*                      C. *Second incisors*                      E. *First molars*
- B. *Canines*                      D. *Second premolars*

**21.** Parents of a 12-year-old child consulted an orthodontist about improper position of the child's upper teeth. Objectively: the face is narrow, elongated; the developing occlusion is present (temporary second molars). The 13 and 23 teeth are located beyond the dental arch, they deviate to the lips above the occlusal plane, there is a 2,5 mm gap between the 12 and 14 teeth, and a 1,5 mm gap between the 22 and 24 ones, 45° rotation the 33 and 43 teeth is present. Choose the most rational method of treatment:

- A. *Extraction of the premolars and relocation of the canines*
- B. *Expansion of dental arches in the region of canine apices*
- C. *Extraction of temporary premolars and expansion of dental arches*
- D. *Compact osteotomy and expansion of dental arches*
- E. *All the answers are wrong*

**Children's dental prosthetics. Constructions of dental prostheses  
in children to make up the anatomical shape of the teeth**

1. Mother of a 3 year old child brought the child to an orthodontist and complained about total lack of crown part of the 51 and 61 teeth. What tactics should the doctor choose?

- A. *Thin-walled cap*                      C. *Stump tooth*                      E. *Tooth extraction*  
B. *Metal-ceramic crown*                      D. *Inlay*

2. An 11-year-old child complains about missing crown of the 12 tooth as a result of a trauma. The tooth root is well treated. What prosthetic construction is indicated for elimination of this defect?

- A. *Il'ina-Marcosian's pivot tooth*  
B. *Cantilever prosthesis supported by the 11 tooth*  
C. *Cantilever prosthesis supported by the 13 tooth*  
D. *Bridge-like prosthesis supported by the 13 and 11 teeth*  
E. *Partial removable replacing prosthesis*

3. An 8-year-old boy complains of a defect in the 11 tooth crown. Objectively: 1/3 of the 11 tooth crown is broken off, the pulp chamber is closed. Radiograph shows incomplete root formation. Select the optimal way of prosthetics for the 11 tooth:

- A. *Thin-walled metal crown*                      D. *Post and core*  
B. *Metal-ceramic crown*                      E. *Combined crown*  
C. *Plastic crown*

4. A 12 year old girl complained about a crown defect in the frontal part of her upper jaw. Anamnesis data: the tooth was filled more than once but the fillings fell out. Objectively: the 12 tooth is filled. There is IV class defect according to Black's classification. Devitalization has never been performed, percussion of the 12 tooth is painless. What orthopaedic construction should be applied in this case?

- A. *Circumpulpar pin inlay*                      C. *Halfcrown*                      E. *Metal crown*  
B. *Metal-ceramic crown*                      D. *Ceramic crown*

**Children's dental prosthetics. Filling defects of dental arches  
in children with removable prostheses.**

1. A 10-year-old boy complains about missing teeth. Objectively: the face is symmetrical, disproportional because of shortening of the lower third. In the oral cavity: the 12, 14, 15, 17, 22, 24, 25, 27, 34, 35, 37, 44, 45, 47 teeth are missing. X-ray picture shows partial adentia and absence of some tooth germs. Choose the most efficient prosthetic device:

- A. *Partial removable lamellar prosthesis for both jaws*  
B. *Bridge prostheses*  
C. *Clasp dental prostheses*  
D. *Cantilever dental bridges*  
E. *The defect should be restored by implants*

2. A 12-year-old child presents with missing 31 and 41 teeth, the gap between the 32 and 42 teeth is 10 mm. Choose the most rational denture construction:

- A. *Partial lamellar removable adjustable denture*
- B. *Interdental wedge*
- C. *Clasp denture*
- D. *Dental bridge*
- E. *Adjustable microprostheses*

3. A 5-year-old child was found to have missing upper molars. Lower incisors are in contact with the mucous membrane of palate. Specify the doctor's tactics:

- A. *Fabricate a removable laminar denture*
- B. *Examine the child every six months until the eruption of permanent teeth*
- C. *Examine the child once a year until the eruption of permanent teeth*
- D. *Fabricate an orthodontic appliance for the treatment of closed bite*
- E. *Medical intervention is not needed*

### **Traumatic injuries of the teeth and jaws in children.**

1. A 5-year-old child sustained a dental injury. Objectively: the crowns of the 51, 61 teeth are shorter than neighbouring teeth by 1/2. Mucous membrane is edematous and hyperemic in the region of the 51, 61 teeth. X-ray picture shows that there is no periodontal fissure in the apical parts of roots of the 51, 61 teeth, apices of the 51, 61 teeth are imbedded into the spongy substance of body of maxilla. What treatment tactics would be the most efficient?

- A. *Extraction of the 51, 61 teeth*
- B. *Regular medical check-up*
- C. *Reposition of the 51, 61 teeth*
- D. *Ligature splinting of the 51, 61 teeth*
- E. *Reimplantation*

2. A 12 year old girl complained about a crown defect in the frontal part of her upper jaw. Anamnesis data: the tooth was filled more than once but the fillings fell out. Objectively: the 12 tooth is filled. There is IV class defect according to Black's classification. Devitalization has never been performed, percussion of the 12 tooth is painless. What orthopaedic construction should be applied in this case?

- A. *Circumpulpal pin inlay*
- B. *Metal-ceramic crown*
- C. *Halfcrown*
- D. *Ceramic crown*
- E. *Metal crown*

### **The etiology, pathogenesis, diagnosis and treatment of congenital malformations of the face.**

1. A child was born with schistasis of alveolar process, hard and soft palate. The optimal way to feed the child before the surgery will be through:

- A. *Obturator*
- B. *Enteric feeding tube*
- C. *Baby bottle nipple*
- D. *Spoon*
- E. *—*

2. Floating obturators (Case's, Chasovskaya's etc.) for the defects in the hard and soft palate are fabricated according to impressions obtained by means of S-shaped spatula. Which impression material is used in this case?

- A. *Stens*
- B. *Orthocor*
- C. *Stomalgin*
- D. *Dentafol*
- E. *Plaster*

3. A 3-year-old child has a hard and soft palate defect. It is planned to fabricate a "floating" Cese obturator (Chasovskaya modification). What impression material should be used?

- A. *Thermoplastic or silicone*
- B. *Stomalgin*
- C. *Gypsum*
- D. *Hydrocolloid*
- E. *Eugenol-zinc*

## 2017

1. A girl is 8 years old. She complains of impaired mastication. Objectively: on examination of the oral cavity the cutting edges of her lower incisors touch the palatine mucosa in the frontal area; the upper frontal teeth overlap with the lower ones by full height of their crowns. On the lower jaw the occlusal curve of the front teeth is markedly concave. Make the provisional diagnosis:

- A. *Deep overbite*
- B. *Open bite*
- C. *False prognathism*
- D. *True prognathism*
- E. *Cross bite*

2. A 43-year-old woman complains of mobility and displacement of her upper front teeth. Objectively: dental formula is 17 16 15 14 13 12 11 21 22 23 24 25 26 27 47 46 45 44 43 42 41 31 32 33 34 35 36 37. Teeth 12 11 21 22 are slanted towards the vestibular side, diastema and tremata are observed, I–II degree teeth mobility is detected. Select the orthodontic appliance for correction of teeth misalignment as a part of complex treatment of periodontal disease:

- A. *Palatal plate with vestibular arch*
- B. *Bynin appliance*
- C. *Schwartz appliance*
- D. *Katz crown*
- E. *Palatal plate with inclined plane*

3. A boy is 10 years old. He complains of sloped chin and impaired mastication. Anamnesis states formula feeding. Objectively: corellation of the 6th teeth is of the Angle's II class. Sagittal fissure is 7 mm. Eschler-Bittner test is positive. What is the most likely diagnosis?

- A. *Prognathism, distal mandibular displacement*
- B. *Prognathism, maxillary macrognathia*
- C. *Retrusion of the lower jaw frontal area*
- D. *Progenia, mandibular macrognathia*
- E. *Protrusion of the upper jaw frontal area*



4. A 5-year-old child has bad habit of sucking on his tongue. At the front area there is a small vertical fissure up to 2 mm in size. Neutral closure is observed in the lateral areas of the jaws. The child is diagnosed with open traumatic bite of the I degree. A vestibulo-buccal shield was prescribed for treatment. What is the function of the appliance in the given case?

- A. *Treatment and prevention*
- B. *Prevention*
- C. *Retention*
- D. *Passive*
- E. *Treatment*

5. A child is 8 years old. There are complaints of congested upper incisors. Objectively: the first molars closure is of Angle's I class, frontal overbite is orthognathic. The 12 and 22 teeth erupt palatinally with space deficiency of 2/3 of the tooth crown. The 11 and 21 teeth are 10 mm each in cross-section. The child has inherited father's facial type with prognathism and macrodontia of the central incisors. Choose the preventive treatment, considering this hereditary pathology:

- A. *Hotz serial extraction to reduce the dental arch*
- B. *Jaw expansion to provide the space for the 12 and 21 teeth*
- C. *Massage of the 12 and 21 teeth area to stimulate their eruption*
- D. *Extraction of the 12 and 21 teeth to reduce the dental arch*
- E. *Filing down of the 11 and 21 approximal surfaces to provide the space for the 12 and 22 teeth*

6. Parents of an 8-year-old child have made an appointment with an orthodontist. There are complaints of their child having traumas of oral mucosa. Objectively: decreased height of the lower face, everted lower lip, deep labiomental furrow, milk occlusion. The upper incisors fully cover the lower ones; cutting surface of the lower incisors make contact with the anterior third of the palate. Mesiodistal ratio of the canines and the first permanent molars is normal. Grouping of the upper and lower front teeth is dissimilar. Make the diagnosis according to the Kalvelis classification:

- A. *Deep traumatic overbite*
- B. *Deep incisor overbite*
- C. *Deep neutral occlusion*
- D. *Deep prognathic (roof-shaped) occlusion*
- E. –

7. Preventive examination of a 5-year-old child revealed a habit of lower lip biting. What malocclusion may develop if the child keeps this habit?

- A. *Anterior bite*
- B. *Prognathic bite*
- C. *Open bite*
- D. *Deep overbite*
- E. *Cross-bite*

**8.** A 7-year-old child has protruding chin, the lower lip overlaps the upper one. There are diastema and tremata between the lower incisors, the lower incisors overlap the upper incisors by  $\frac{2}{3}$  of the crown height. First permanent molars demonstrate Angle's class III relation. Sagittal gap is 3 mm. The correct treatment tactics would be to:

- A. Use Bruckl's appliance*
- B. Recommend a complex of myogymnastic exercises*
- C. Use Angle's slider appliance*
- D. Use Bynin's appliance*
- E. Use Schwartz's appliance*

**9.** During preventive examination a 5-year-old child was found to have insufficient physiological attrition of tubercles of the deciduous canines. What treatment tactics should a doctor choose?

- A. To shave off the retained canine tubercles*
- B. Medical examination once a month until the incisors are replaced*
- C. Medical examination every 6 months until the incisors are replaced*
- D. Medical examination every 6 months until the canines are replaced*
- E. No medical intervention is necessary*

**10.** During examination of a 5-year-old child the orthodontist revealed no wear of teeth, no tremata and diastemata, orthogenic occlusion. Which of the following symptoms detected in the 5-year old child is a sign of future teeth overcrowding?

- A. Absence of tremata and diastemata*
- B. Absence of wear of teeth*
- C. Orthogenic occlusion*
- D. Orthognathic bite*
- E. Absence of mesial step in the region of second temporary molars*

**11.** An orthodontist has registered for regular check-ups a 3,5-year-old child, who has a bad habit of finger sucking and presents with infantile swallowing. On examination: milk occlusion, direct contact of incisors. What preventive appliance would be optimal in this case?

- A. Vestibulo-buccal shield*
- B. Schonherr's standard vestibular plate*
- C. Frankel's functional regulator*
- D. Janssen's bionator*
- E. Rudolf's plate with loops*

## Examples of solving the tasks "Krok-2" "Dentistry "

### Pediatric restorative dentistry

**1. A 7-year-old boy complains of increased body temperature, up to 38°C, headache, sore throat. Objectively: there are erosions on the slightly hyperemic mucosa of the soft palate, anterior palatal bars, and tonsils. The submandibular lymph nodes are slightly enlarged, painless. Name the causative agent of this disease:**

- A. *Coxsackie virus*
- B. *Herpes simplex virus*
- C. *Epstein-Barr virus*
- D. *Klebs-Loeffler bacillus*
- E. *Bordet-Gengou bacillus*

**The correct answer:** Coxsackie virus

**Justification:** First of all pay attention to distracters. Which diseases do they correspond to? What kind of clinical manifestations are typical for each disease? For diagnosis. It is necessary to consider the patient's age, start of diseases, type, amount, localization of the affection elements. (Answer the questions. When did the first symptoms of the disease start? What is the reason for their appearance? Are there the skin manifestations?)

**Coxsackie virus** belongs to enteroviruses – is the causative agent of herpetic angina.

Disease affects children of all ages, mostly preschool and junior (**7-year-old boy**). Herpetic angina starts abruptly, is characterized by acute fever with the increase of body temperature to 38.0–39.0 °C (**up to 38 °C**) and small vesicles in the pharynx. (**A boy has sore throat. There are erosions on the slightly hyperemic mucosa of the soft palate, anterior palatal bars, and tonsils**). Oral mucosa of the soft palate, anterior palatine arches, tonsils and tongue is covered with small vesicles, which quickly turn into erosions, are located on moderately hyperemic mucosa. **Submandibular lymphnodes are enlarged and slightly painful**. Skin rash and gingivitis are not present in case of herpetic angina.

**Herpes simplex virus** – is the causative agent of acute herpetic stomatitis. It affects children of 6months to 3 years old (most often) but the disease may also occur in older children. The disease is often characterized by body temperature to 37.5–39.0 °C. **lymphadenitis** of submandibular (more rarely – cervical) lymph nodes Hyperemia, bleeding gums (**catarrhal gingivitis**), catarrhal angina are defined in the oral cavity. Multiple **rash elements** appear on the background of **increased** hyperemia. The elements **locate** on the oral mucosa of **lips, cheeks, tongue, soft and hard palates and gums**. vesicles (**1–3 mm** in diameter) forming secondary elements- round or oval erosions with yellowish fibrinous coating and thin red halo;

**Epstein-Barr virus** – filtered virus – is the causative agent of Infectious Mononucleosis (Filatov – Pfeiffer's disease) is a low contagious infectious disease characterized by **fever, inflammation of pharynx, enlarged lymph nodes, spleen, liver and mononuclear reaction in blood**. It affects children **from 1 to 10–12 years old mainly**.

The disease begins **gradually**. The symptoms: rhinitis, **slight increase** of body temperature, enlargement of lymph nodes, cervical (along the clavisternomastoid muscle) and submandibular, in particular, are the most constant features. Sometimes, inguinal, axillary and other lymph nodes are also enlarged, but their individual enlargement (without the cervical ones) is not typical for the infectious mononucleosis and **some features of affection of the throat**. Collateral inflammation around them is observed, but the inflammatory features are expressed on the skin. An **expressed hyperemia of tonsils** is typical for all children with infectious mononucleosis. The process can resemble lacunar, follicular or catarrhal angina. In case of angina, parts of tonsils are coated with yellowish grey coating. Thus, the presence of **coating resembles diphtheria**; however, in case of infectious mononucleosis the coating is crumbly and **easy to remove**.

**Klebs-Loeffler bacillus** synonym **Corynebacterium diphtheria** – **gram positive** – is the causative agent of **Diphtheria**. It affects children. It is characterized by local fibrinous inflammation of mucosa (more often oral and nasalpharyngeal), general intoxication and affection of circulatory and nervous systems. **headache**.

Diphtheria begins with the **pain in the throat and increase of body temperature**.

**Hyperemia and edema of tonsils'** are the typical symptoms. Whitish gray areas appear on the tonsils; the areas gradually acquire the appearance of thick coating, typical for diphtheria, the **coating has smooth surface with clear borders**. It is **tightly** attached to the adjacent tissues. (pp. 204–205)

**Bordet-Gengou bacillus**– is the causative agent of **Whooping cough** (pp. 203–204). It affects children of acute infectious disease, which is characterized by specific **spasmodic cough that gradually increases**, catarrhal inflammation of the upper respiratory tract. The body temperature is **subfebrile**. **Cyanosis of the face and the oral mucosa are observed during coughing, ulcers on the lingual frenulum**

**2. A 12-year-old boy complains of painful and bleeding gums on his upper jaw. Objectively the gingival margin in the area of the 13, 12, 11, 21, 22, 23 teeth is swollen, hyperemic, deformed due to overgrowths. Gingival papilla cover the crowns by 1/3 of their height, bleed on touch. Upper front teeth are overcrowded. X-ray shows no pathological changes of the periodontium. What drugs should be administered for topical treatment in the first place?**

*A. Nonsteroidal antiinflammatory drugs*

*B. Sclerosants*

*C. Steroidal antiinflammatory drugs*

*D. Keratoplastic agents*

*E. Cytostatic agents*

**The correct answer:** Nonsteroidal antiinflammatory drugs

**Justification:**

**Division of the task** – selection of treatment

**Diagnose** – Chronic generalized hypertrophic gingivitis I degree

**Why?**

**Gingivitis** – (complains of painful and bleeding gums, gingival margin is hyperemic, swollen, X-ray shows no pathological changes of the periodontium).

**Generalized** – means more than 3 teeth (in the area of the 13, 12, 11, 21, 22, 23 teeth)

**Hypertrophic** – gingival margin is deformed due to **overgrowths**

**I degree** (Gingival papilla cover the crowns by **1/3** of their height)

**Selection of treatment**

**Due to priority** *Nonsteroidal antiinflammatory drugs* (can reduce inflammation, while less dangerous at this age than *Steroidal antiinflammatory drugs*)

*Sclerosants* are used **only** after removal of inflammation

*Keratoplastic agents* should not be administered because there are no signs of ulcers or another damages (the purpose of their application promoting the production of keratin, after removal of inflammation)

*Cytostatic agents* should not be administered because overgrowths due to inflammation, not due to cancer

3. A 8,5-year-old child is mostly healthy. There is a complaint of pain in the upper left tooth, due to it having been physically damaged 3 hours ago. Objectively: 1/2 of the 21 tooth crown is destroyed, the pulp is significantly exposed, red, sharply painful and bleeding when probed. Percussion of the 21 tooth is sharply painful. Choose the optimal method of the 21 tooth treatment:

- A. Vital amputation
- B. Vital extirpation
- C. Devital amputation
- D. Devital extirpation
- E. Biological method

**The correct answer:** Vital amputation

**Justification:**

First of all pay attention to clinical manifestations of task and indications for each treatment approach.

The choice of the method of treatment depends on the

Time, passed since the moment of trauma, (**physically damaged 3 hours ago**), root development stage, (**8,5-year-old child tooth 21 – stage of root formation**)

the size of exposed pulp, (the pulp is **significantly** exposed)  
somatic health of the child (**child is mostly healthy**).

Pulp viability preservation is extremely important for immature teeth.

(**Devital methods are not good**) In case of a **dotted pulp** exposure in a tooth with **immature roots** a **biological method** of treatment or a vital amputation is used (if it has passed **not more than 6 hours** after the trauma).

If the pulp exposition area is **significant or dotted**, but the after trauma time period is **1–3 days**, it is necessary to perform a **vital amputation** In teeth with **mature root** a vital or devital **pulp extirpation** is performed;

**4. A 11-year-old child complains of pain during eating food, especially hot, in the lower right lateral tooth. On the masticatory surface of the 46 tooth there is a large carious cavity filled with softened light-brown dentin. The cavity is located within parapulpal dentin. In the projection of mesiobuccal pulp horn the carious cavity communicates with the pulp chamber. Deep probing is painful. Electric pulp test – 60 microamperes. Make the diagnosis:**

- A. Chronic gangrenous pulpitis*
- B. Chronic hypertrophic pulpitis*
- C. Acute diffuse pulpitis*
- D. Chronic fibrous pulpitis*
- E. Acute focal pulpitis*

**The correct answer:** Chronic gangrenous pulpitis

**Justification:**

There are no typical symptoms of acute pulpitis. (complains **spontaneous pain** is typical for all **acute** pulpitis, the pulp chamber is closed)

Chronic pulpitis (pain during eating food, communication with the pulp chamber)

**Chronic gangrenous pulpitis** Deep probing is painful, electric pulp test – 60 microamperes (because is characterized by complete or partial necrotization of the coronal pulp and localization of the chronic inflammation process in the root pulp).

**Chronic hypertrophic pulpitis** is characterized by **growth** of granulating and young connective tissues in it. Children complain of bleeding «from the tooth» and, **very rarely, of pain during eating** and toothbrushing.

**Chronic fibrous pulpitis.** pain in case of mechanical irritants or pain caused by temperature changes. However, in children may progress asymptotically, and may only be detected at the regular oral cavity sanitation.

Objective examination: a deep carious cavity connected with the pulp chamber; the pulp is dark - red, bleeding and painful from probing.

**5. A 14-year-old boy complains of rapid wearing-off of tooth crowns. Objectively: tooth crowns are worn-off by 1/3. Enamel easily chips off and is pale gray in color. Make the diagnosis:**

- A. Stainton-Capdepon syndrome*
- D. Systemic hypoplasia*
- B. Dentinogenesis imperfecta*
- E. Focal hypoplasia*
- C. Fluorosis*

Stainton-Capdepon syndrome **is the Type II of imperfect dentinogenesis** the disease does not usually combine with general diseases Chipping off and **pale** gray color of **enamel** is typical for Stainton-Capdepon syndrome.

**White, yellow or brown** discoloration is typical for Fluorosis, Systemic hypoplasia, or focal hypoplasia.

6. A 14-year-old child complains of throbbing undulating pain in the lower left teeth, which aggravates due to hot stimuli. Objectively: on the masticatory surface of the 36 tooth there is a carious cavity within parapulpal dentin, which is non-communicating with the dental cavity. The cavity floor probing is painless, tooth percussion is painful. What treatment method would be optimal in the given case?

- A. Vital extirpation      C. Devital amputation      E. Biological method  
B. Devital extirpation      D. Vital amputation

The correct answer: Vital extirpation

#### Justification:

Due to complains (**throbbing undulating pain** in the lower left teeth, which aggravates due to **hot** stimuli); due to results of objective examinations (a carious cavity, **is not connected** with the pulp chamber, painful percussion) **child has Acute purulent pulpitis**. Vital methods are more optimal than Devital in general. Amputation, as a level, must not be recommended (purulent process in tooth with fully formed root)

Indications for the **vital extirpation** of pulp in permanent teeth:

- in teeth with mature roots: **all forms of acute and chronic pulpitis**, if conservative methods are ineffective or contraindicated;
- in teeth with immature roots: acute purulent pulpitis; pulpitis with expressed features of perifocal or focal periodontitis; chronic gangrenous pulpitis.

Indications for **conservative method** of treatment of pulpitis in permanent teeth:

- acute traumatic pulpitis (spontaneous pulp exposure during the carious cavity preparation);
- acute traumatic pulpitis (fracture of the tooth crown with pulp exposure in the period up to 6 hours after the injury);
- pulpal hyperemia;
- acute serous localized pulpitis;
- chronic fibrous pulpitis (in teeth with immature roots).

### Orthodontics

1. Parents of a 9-year-old boy complain about permanently open mouth of the child. External examination revealed elongation of the lower face part, non- closure of lips. Examination of the oral cavity revealed early mixed dentition. Relationship of the first permanent molars is neutral, vertical space is 5 mm. What is the most likely diagnosis?

- A. Open bite      C. Mesial occlusion      E. Cross bite  
B. Distal occlusion      D. Deep overbite

Correct answer Open bite

#### Justification

**for open bite** there are typical **complain on permanently open mouth**

External examination (typical facial signs) **elongation of the lower face part, non- closure of lips**

Examination of the oral cavity **vertical space is 5 mm**.



**2. Examination of a 9-year-old child revealed protrudent chin, the lower lip overlapping the upper lip. There are diastemas and tremas between the lower incisors, the lower incisors overlap the upper ones by 2/3 of crown height. Sagittal fissure is 3 mm. Specify the treatment tactics:**

- |                               |                                     |
|-------------------------------|-------------------------------------|
| <i>A. Brueckl's appliance</i> | <i>D. Angle's sliding appliance</i> |
| <i>B. Bynin's guard</i>       | <i>E. Myogymnastics complex</i>     |
| <i>C. Schwartz' guard</i>     |                                     |

**Correct answer. Brueckl's appliance**

#### **Justification**

First of all you should determine the diagnose

**protrudent chin, the lower lip overlapping the upper lip** – are the typical facial sings for Mesial occlusion

**the lower incisors overlap the upper ones by 2/3 of crown height. Sagittal fissure is 3 mm** are the typical facial sings at examination of the oral cavity.

Brueckl's appliance is recommended **for children at 9-year**

**3. Mother of a 3 year old child brought the child to an orthodontist and complained about total lack of crown part of the 51 and 61 teeth. What tactics should the doctor choose?**

- |                               |                       |                            |
|-------------------------------|-----------------------|----------------------------|
| <i>A. Thin-walled cap</i>     | <i>C. Stump tooth</i> | <i>E. Tooth extraction</i> |
| <i>B. Metal-ceramic crown</i> | <i>D. Inlay</i>       |                            |

**Correct answer Open bite**

#### **Justification**

At the age **3 year old the Thin-walled cap** are recommended **at total lack of crown part of the 51 and 61 teeth.**

The answers B., C., D., E. are contraindicated in this case

### **Pediatric Oral and Maxillofacial Surgery**

**1. Parents of an 8-year-old child with Down syndrome took the child to a doctor for oral cavity sanitation. After the examination entailing great difficulties the child was found to have four teeth decayed as a result of chronic periodontitis. What kind of anesthesia should be chosen for surgical sanitation in one visit?**

- A. Phlebonarcosis*
- B. Conduction anesthesia*
- C. Mask anesthesia*
- D. Endotracheal anesthesia*
- E. Endotracheal anesthesia through a tracheostoma*

**Correct answer Phlebonarcosis**

#### **Justification**

Child with **Down syndrome** belongs to group for special needs care. Can select less dangerous and easy procedure

**2. A 4-year-old girl presents with body temperature rise, aggravation of general condition. The symptoms have been observed for 3 days. Objectively: general condition is grave, body temperature is 38,6 °C, the girl is anxious and pale. She presents also with halitosis, hyperemia and edema of gingival mucous membrane in the region of the 83, 84, 85 teeth on both sides from the alveolar process. The mentioned teeth are mobile; their percussion causes acute pain; the 84 tooth is filled. What is the most likely diagnosis?**

- A. Acute odontogenic mandibular osteomyelitis beginning from the 84 tooth*
- B. Acute sialoadenitis of submandibular salivary gland*
- C. Exacerbation of chronic periodontitis of the 84 tooth*
- D. Suppuration of the radiculodental mandibular cyst beginning from the 84 tooth*
- E. Acute odontogenic mandibular periostitis beginning from the 84 tooth*

**Correct answer** Acute odontogenic mandibular osteomyelitis beginning from the 84 tooth

#### **Justification**

**The aggravation of general condition, body temperature is 38,6 °C !!!!!, hyperemia and edema of gingival mucous on both sides** from the alveolar process and also mobility **of several teeth** –are typical symptoms for Acute odontogenic mandibular osteomyelitis

**3. A 9-year-old boy has been diagnosed with a complete dislocation of the 21 tooth. The child got injured 20 hours ago. He has diabetes. Select a treatment tactics:**

- A. The tooth cannot be preserved or reimplanted*
- B. Reimplantation, fixation of the tooth and further follow-up*
- C. Root apex resection, reimplantation, fixation of the tooth*
- D. Filling of the root canal with amalgam, reimplantation*
- E. Filling of the root canal with paste containing calcium, reimplantation, fixation of the tooth*

**Correct answer** The tooth cannot be preserved or reimplanted

#### **Justification**

There is an information about general disease (**He has diabetes**)

**Results of control (section “Pediatric restorative dentistry”)**

**Student’s name.**\_\_\_\_\_

**Group№**\_\_\_\_\_

<b>Level</b>	<b>The data of control</b>	<b>% of correct answers</b>	<b>Teacher’s Signature</b>
<b>Initial</b>			
<b>Intermediate</b>			
<b>Final level</b>			

**Results of control (section “Pediatric Oral and Maxillofacial Surgery”)**

**Student’s name.**\_\_\_\_\_

**Group№**\_\_\_\_\_

<b>Level</b>	<b>The data of control</b>	<b>% of correct answers</b>	<b>Teacher’s Signature</b>
<b>Initial</b>			
<b>Final level</b>			

**Results of control (section “Orthodontic”)**

**Student’s name.**\_\_\_\_\_

**Group№**\_\_\_\_\_

<b>Level</b>	<b>The data of control</b>	<b>% of correct answers</b>	<b>Teacher’s Signature</b>
<b>Initial</b>			
<b>Final level</b>			

*Учебное издание*

**Контрольные тесты для подготовки  
к лицензионному экзамену  
"КРОК-2. Стоматология детского возраста"  
примерами решения задач  
(для иностранных студентов  
V курса 6-го факультета)**

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