В.А. Маланчук, А.В. Копчак // Вісник стоматології. – 2005. – № 1. – С. 90-92.
5. Гудар'ян О.О., Ідашкіна Н.Г., Маджді А.А. Особливості лікування переломів нижньої щелепи з використанням брекет-техніки / О.О. Гудар'ян, Н.Г. Ідашкіна, А.А. Маджді // The scientific heritage. – 2016. – Vol. 1. – № 2 (2). – Pp. 24-28.
6. Ейсмунд А.П., Маджді Аліакбар, Ідашкіна Н.Г. Оцінка ефективності лікування переломів нижньої щелепи новими назубними дротяними шинами порівняно з традиційними методиками / А.П. Ейсмунд, Маджді Аліакбар, Н.Г. Ідашкіна //Медичні перспективи. – 2013. – Т. XVIII. – № 4. – С. 45-52.

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CLINICAL CASE OF A CHILD K. WITH A DIAGNOSIS: IRON DEFICIENCY ANEMIA OF MODERATE SEVERITY. LEFT-SIDED DIAPHRAGMATIC HERNIA

Relevance. This problem is relevant not only in connection with the increased frequency of occurrence, but also the high probability of complication development. According to static data, more than 700 thousand children are born with diaphragmatic hernia from 1 January 2000 year. Diaphragmatic hernia occurs with a frequency (1 на 1700). Mortality in this disease is 1-3% of the total infant mortality rate, and in the first year of life – 10% of deaths among children dying due to malformations.

Illustrative is the data about that 147 children are born every day with this disease, that is, every 10 minutes a child is born into the world with a diaphragmatic hernia [1, pp. 11-16].

At older ages, more common hiatal hernia. It is thought that hiatal hernia suffers about 0.5% of the total adult population [2, pp. 72-76].

Clinical observations.

Boy 7 years, entered the hospital with complaints: on pallor, weakness, decrease in appetite, dysgeusia. The above complaints appeared a year ago. From anamnesis know that the year was registered at the pediatrician, treatment was carried out of divalent iron preparations, without effect. For assistance did not apply to a hematologist.

Objectively: state of moderate severity, pale skin, epithelial changes (trophic disorders of the skin, nails, hair, mucous membranes).

Auscultation in the lung vesicular breathing, left in the chest auscultated peristaltic noises. Heart sounds are loud, rhythmic. Abdomen soft, painless, parenchymal organs not increased.

In connection with atypical auscultation on the left lung was performed X-ray of the chest

On radiographs of the chest, lung fields without focal changes. Heart, mediastinum shifted to the right. From left dome of the diaphragm at the level IV ribs at the same levels of gas bubble stomach. Right, left sinuses are free. Relaxation of the left dome of the diaphragm. Conclusion: The left-sided diaphragmatic hernia.

Laboratory findings. Complete blood count RBC-3.4 * 10^{12}/L; HGB – 85g/L; MCH – 0,7; PLT – 180 * 10^{9}/L; Retic – 0,2%; WBC – 4.0 * 10^{9}/L; ESR-15.

Biochemical parameters of blood: serum iron – 8mkm /l; iron binding overall capacity of serum – 50mkm/L; iron binding latent ability of serum – 45mkm/L; Whey ferrites – 10 microns/L.

The diagnosis: Iron deficiency anemia is of moderate severity. Left-sided diaphragmatic hernia.

Therapy. Operative correction – laparotomy, plastic left dome of the diaphragm, with local tissues.

After surgery, was assigned divalent iron supplements at a dose of 5 mg per kg per day for 6 months. The child's condition improved significantly, no complaints, laboratory indicators (RBC-4.0 10^{12}/L; HGB 128 – g/L; MCH – 0,98;) During the year observed in hematologist, after which he was removed from the register.

Complications of diaphragmatic hernias are manifold and include: inflammation of the hernia, infringement of the hernia, bleeding, intestinal obstruction. The most common complications in pediatrics are gastroesophageal reflux disease, peptic ulcer, pyotorax, pneumonia, cardiac arrhythmias, dysuric disorders, and deficiency anemia.

When diaphragmatic hernias major pathogenetic mechanisms of formation of anemia include: bleeding from the gastrointestinal tract (GIT), with the development of her strangulated, violation of absorption of iron [3, pp. 23].

Under physiological conditions, absorption occurs mainly in the duodenum and the early jejunum. At deficiency of iron in the body of the suction zone

extends distally. Iron is absorbed in the form of heme (10% of the absorbed iron) and a non-heme (9%). The degree of its assimilation is determined by a number of factors, which may interfere with how and to promote iron absorption. Most of ferric iron Fe (III) to form insoluble salts, for example, phytin, tannin and phosphate present in foods, and is excreted in the feces. Bioavailability of ferric and synthetic food gidrookisnyh iron complexes (III) iron release rate is determined from them and the concentration of iron-binding proteins such as transferrin, ferritin, mucins, integrins and mobilferrin. The amount of iron absorbed by the body, is strictly controlled by the mechanism, the details of which have not been studied. Absorption of iron ion compounds depends on the valence of the iron ions. Iron mature enterocytes absorbed mainly in the form of ferro-ions (Fe2 +). Ferric iron (ferric ions) partially imported into the enterocyte, but the majority is reduced to ferro-ions. Ferry ions (Fe3 +), interacting with mucin and beta.3-integrin, are imported into the intracellular space enterocyte villous duodenal mucosa membrane using extracellular chaperone located – calreticulin-like mobilferrina. A certain part of Fe3 + ions on the apical surface of the villous epithelium under the influence membrannosvyazannoy ferrireduktazy enterocyte brush border (duodenal cytochrome b – Dcytb) is reduced to the ferrous state (ferro-ions Fe2 +). High-grade iron absorption in the duodenum will only if the mucosa of the intestine is functioning normally. If a person has gastrointestinal disease, it will provoke a damage of the intestinal mucosa, thus reducing the inflow rate of iron in the body. By violation of absorption of iron can cause inflammation, scar or atrophic processes in the small intestine, resection of the small intestine and the presence of gastrointestinal themselves hernias. Clinical manifestations include: pallor, lethargy, loss of appetite and taste perversion [4, pp. 25-29].

he development of iron deficiency in the body has a clear staging. Sequentially developing stages of iron deficiency:

• Latent iron deficiency is characterized by a decrease in iron stores in the depot and the beginning of iron deficiency erythropoiesis.

• Iron deficiency anemia is characterized by a combination of sideropenic and anemic syndromes [5, p. 76].

The main criteria for diagnosis in children: auscultation in lungs auscultated peristaltic noises, increasing fatigue, lethargy, lack of clinical characteristic of diaphragmatic hernia.

According to statistics deficiency anemia observed in 15% of children, they vary widely – some are related to the lack of B vitamins, while others – with folic acid deficiency, but the overwhelming majority of anemia develops because of iron deficiency, the anemia called iron-deficiency, and they are the most common (about 80% of anemia) [6, pp. 40-48].

One of the most common is anemia with iron deficiency, iron deficiency anemia (IDA), which is more than 80% of all anemia’s. According to the

World Health Organization (WHO), more than 500 thousand people in the world suffer from IDA. The prevalence of IDA in children in Ukraine and developed European countries is approximately 50% – in preschool children; 20% – in teenagers [7, pp. 65-74].

Iron deficiency leads to various pathological states to infectious diseases gastrointestinal tract and the respiratory system, without iron cease to function normally brain structures, violation of psychological development. In children who in infancy was diagnosed with iron-deficiency anemia, aged 3-4 years, are violation of the transmission of nerve impulses from the brain centers to the organs of hearing and visual impairment due to violations of myelination and, as a consequence, the violation of nerve conduction [8, pp. 329-347].

Important in the treatment of iron deficiency anemia is the establishment and elimination of its causes. Therapy only iron preparations in the presence of underlying disease that led to the IDA does not give good results. Clinical features given us the observation is the complete absence of any complaints about the dynamic disorder when the only symptom was diaphragmatic hernia symptoms of anemia which was pallor, lethargy, loss of appetite and taste perversion [9, 10, pp. 177-184].

Conclusion. One of the factors of iron deficiency anemia may be the presence of abnormalities of the gastrointestinal tract, so patients with long iron deficiency conditions require in-depth examination of the gastrointestinal tract.

References:

1. Isakov, Ju. F., Dronov A.F. (2009). Detskaja hirurgija: nacional'noe rukovodstvo. [Pediatric surgery: national leadership]. Podgotovleno i rekomendovano Rossijskoj associaciej detskih hirurgov i Associaciej medicinskih obshhestv po kachestvu, Moskva: «GEOTAR-Media», pp. 11-16.
2. Harrington KP, Goldman AP. (2005) The role of extracorporeal membrane oxygenation in congenital diaphragmatic hernia. Semin Pediatr Surg. 14 (1), pp. 72-76. Available at: https://www.ncbi.nlm.nih.gov/pubmed/15770591.
3. Ivanov, S. L. (2010). Vrozhdennaja diafragmal'naja gryzha. [Congenital diaphragmatic hernia]. Zhurnal intensivnoj terapii, 2, pp. 23.
4. Gajdukova, S., Vydyborec, S. (2012). Zhelezodeficitnaja anemija. [Iron-deficiency anemia]. Liki Ukraïni, 9, pp. 25-29.
5. Rumjancev, A. G., Zaharov, I. N. (2015). Diagnostika i lechenie zhelezodefitsitnoy anemii u detej i podrostkov. Posobiye dlya vrachey [Diagnosis and treatment iron-defective anemia in children and adolescents. A Manual for Physicians]. Moskva, pp. 76.
6. Tarasova, I.S. (2011). Zhelezodeficitnaja anemija u detej i podrostkov. [Iron deficiency anemia in children and adolescents]. Voprosy sovremennoj pediatrii, 10 (2), pp. 40-48.

7. Dallman, P. R., Looker, A. C. Et Johnson, C. L. (2009). Iron Nutrition in Health and Disease. London, pp. 65-74.
8. Deprest JA, Gratacos E, Nicolaides K, Done E, Van Mieghem T, Gucciardo L, Claus F, Debeer A, Allegaert K, Reiss I, Tibboel D. (2009) Changing perspectives on the perinatal management of isolated congenital diaphragmatic hernia in Europe. Clin Perinatol. 36, pp. 329-347. doi: 10.1016/j.clp.2009.03.004.
9. Terri, D. Johnson-Wimbley, David, Y. Graham (2011). Therap Adv Gastroenterol: Diagnosis and management of iron deficiency anemia in the 21st century, 4(3), pp. 177–184. doi: 10.1177/1756283X11398736.
10. Bermejo, F., García-López, S. (2009). A guide to diagnosis of iron deficiency and iron deficiency anemia in digestive diseases. World J Gastroenterol, 5 (37), 4638-4643. doi: 10.3748 / wjg.15.4638.

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ДІЄТИЧНЕ ХАРЧУВАННЯ У ДІТЕЙ-АЛЕРГІКІВ, ЯКІ ВІДВІДУЮТЬ ДИТЯЧИЙ КОМБІНАТ М. ХАРКОВА

Зростання поширеності харчових алергій відзначається у всіх вікових категоріях населення планети – але особливу небезпеку вони представляють для дітей. Розпізнавання симптомів, своєчасне звернення за медичною допомогою в багатьох випадках може врятувати чиєсь життя [1].

Дитина, що страждає на алергію на різні види продуктів харчування, повинна бути добре проінформована про свою хворобу і необхідності категорично уникати небезпечної для неї їжі – небезпечну алергічну реакцію можуть викликати навіть мізерно малі кількості алергену. Діти які відвідують дитячий садок та мають харчову алергію повинні бути захищеними та отримувати дієтичне харчування [2, с. 12-18].

Мета роботи. Провести аналіз дієтичного харчування дітей 3-х, 4-х і 5-ти річного віку – мешканців м.Харкова, що відвідують комунальний заклад «Дошкільний навчальний заклад (ясла-садок) № 240 комбінованого типу.