

brachymorphic one the scattered type is observed and in a mesomorphic the mixed or scattered types are present. We found that extraorganic nerves of the suprahyoid muscles of the neck form connections with hypoglossal and glossopharyngeal nerves and periarterial sympathetic plexuses of some branches of the external carotid artery. In the depth of mylohyoid and geniohyoid muscles relation was revealed between nerve branches of the left and right sides. Extraorganic nerves enter suprahyoid muscles of the neck mainly from side of their internal surface. Quantity of myelin fibres in nerves, entering suprahyiod muscles of the neck has significant individual variability in studied age groups. We found that the greatest quantity of myelin fibres was in nerve of mylohyoid muscle. According our data this muscle has the most complicated structure of intraorganic nerve plexuses. The investigation has shown that size and volume of muscles depend on the shape of a lower jaw and a neck. Individual variability in the topography and in the amount of nervous branches which come to the muscles was observed in the innervation of the studied muscles. Constant sources of innervation have been determined and additional sources of innervation have been identified. Intermuscular nervous connections were found between the nerves of the muscles of the right and left sides. Peculiarities of the intramuscular nerve branching and the regions of their peak concentration for each of the nerves have been determined. The statistical analysis of the myeloarchitectonics showed quantitative differences in the composition of the myelin component of each studied nerve, while the information analysis revealed uniformity in their structure as communication channels. Innervation of the studied muscles revealed individual variability in the topography and number of the nerve branches supplying the muscles.

**Conclusion**. Findings of research were confirmed by statistical analysis. Our results may utilize for clinical purposes.

## Zeinab Hammoud EXPERIMENTAL PERIODONTITIS IN RATS Kharkiv national medical university, Kharkiv, Ukraine Department of Histology, Cytology and Embryology

**Aim:** The purpose of this study was to assess periodontal destruction following experimentally induced marginal periodontitis in rats by allowing them to freely soft homogenous food over a 30-days observation period. The extent to which the histological changes were examined. In addition, the distances between different junctions in the defleshed jaw were compared.

**Material and methods:** 10 white male rats were divided into two groups. Only five rats were as a control group, marginal periodontitis was induced by soft homogenous food which doesnot need any chewing pressure. Rats were killed after 30 days. Block of the defleshed jaw of rats (Premolar and buccal periodontal tissues) processed for light microscopic examination, followed by formalin fixed species were demineralization 5% Nitric acid and then embedded in paraffin, sectioned (5-7  $\mu$ m) in the bucco-palatal dierction, parallel to the long axis of the tooth. Finally stained with hematoxylin and eosin. First method, histomorphometric analysis was carried out at x 150 magnification to determine distance at different sites: 1. From bifurcation of roots to top of interseptum bone. 2. Between the level of the enamel-cement junction to the top edge of the papilla 3. Between



cementoenamel junction and the alveolar bone crest. 4. From the enamel-cement junction to the bottom base of the pocket.

**Results:** Comparison of the two groups using measuring methods showed significant differences in bone loss, detected irregularity of the alveolar bone crest, resorption tops and sides of the alveolar bone, the bone becomes lower and narrower. Obvious increase observed in the distance from the bifurcation point to top of interseptum bone. In soft tissue periodontal marked leukocytic infiltration, especially in the area of the interdental papillae. Papillae densely infiltrated with neutrophils. 40 % of Rats showed migration of epithelial along root, the epithelium was attached to the tooth well below the cementoenamel junction. Thus, periodontal pockets are formed and are often filled with homogeneous basophilic substance.

**Conclusions:** Histological examination and morphometric data shows that reducation of mechanical stress on teeth leads to the deveploment of degenerative and inflammatory processes in hard and soft periodontal tissues. The result is resorption of alveolar bone, migration of epithelium along the tooth root and formation of pathological pocket.

## Zharova N. V., Kulish V. P., Zhucova V. V. MORPHOFUNCTIONAL FEATURES OF THE OUTORGAN UTEROOVARIAN ANASTOMOSIS

## Kharkiv national medical university, Kharkiv, Ukraine Department of human anatomy

**Introduction.** Studying of the sources of blood supply to human ovaries and locations of their anastomosing is a relevant direction in modern morphological researches. Despite the wide coverage of this issue in the modern literature, the data are sufficiently controversial and require clarification. The data of the sources of blood supply to the ovaries at different ages need to be clarified and studying wider. Variants of anastomosing vessels (uterine and ovarian arteries) have practical importance depending on the type of the constitutional structure of a woman's body.

**Materials and methods.** The materials for the research were 57 isolated internal genital organs women who died from pathology which is not related to the genital sphere, aged 25 to 55 years. The research was carried out taking into account the complex of modern anthropometric somatotype, macromicroscopical researches, the methods of corrosion and filling vessels with gelatin, colored ink.

**Results.** We have studied the place of uterine and ovarian arteries anastomosing, as the ovary receives supply from two systems - the uterine and ovarian arteries. The right and left ovarian arteries depart from the abdominal region of aorta, usually below the renal arteries, the length of 20-22 cm and a diameter of 0.5-0.6 cm at the level of the lower pole of the kidney gives branches to the kidney capsule and ureter. Descending into the pelvic cavity enters the ligament that supports the ovary where shares to its terminal branches – ovarian, going to the mesentery of the ovary and tube, going to the mesentery tube, rarely enters into the ovarian branch of the uterine artery without dividing. Ovarian branch of the ovarian artery gives 3-5 branches to the ovary and to the mesentery of the ovary, comes into anastomosis with the ovarian branch of the uterine artery. As a result of research we have identified three types of utero- ovarian outorgan anastomosis - single , when the ovarian branch of the uterine artery is anastomosing with the ovarian artery (17 preparations), double when ovarian and tubal branch of the uterine artery are anastomosing with branches