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 obsereved 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 deveplopment 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 UTERO-OVARIAN 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

of ovarian artery which has the same name (19 preparations) , triple when three branches are anastomosing - ovarian and tubal branches of the uterine artery anastomosis with branches of ovarian artery of the same name (15 preparations) , and the availability of additional branch of the uterine artery , which runs between the leafs of the broad ligament of the uterus and ovarian artery is anastomosing with at the lateral margin of ovary or in the ligaments that support the ovary (3 preparations). In cases where the ovarian artery was the only source of blood supply to the ovary - in this case, the utero-ovarian anastomosis is absent (3 preparations). In single anastomosis we identified several variants of anastomosing - in the mesentery of the ovary, in the mesentery of the uterine tube, in the ligaments that support the ovary, near tube angle of uterus. The place of junction in double anastomosis varies widely: in the mesentery of uterine tube and in the mesentery of ovary, in the mesentery of uterine tube and in the uterine tube angle, in the mesentery of the uterine tube and in the ligament that supports the ovary, in the mesentery of the uterine tube and in the broad ligament of the uterus. In the triple type the anastomoses are lying in the mesentery of the uterine tube, in the mesentery of the ovary, in the region of ligament that supports the ovary.

Conclusion. We noted that the single anastomosis is predominating for the women with asthenic type of body, for women with normostenic type of body both single and double, the triple anastomoses found in women with hypersthenic body type.

Zyong Huyen Chang

ANTI-AGING EFFECT OF COCONUT (COCOS NUCIFERA L.) WATER ON THE FRESHLY EXTRACTED HUMAN TEETH

Kharkiv national medical university, Kharkiv, Ukraine
Medical Biology Department

Introduction. Coconut water has many nutritional and health benefits. It makes an excellent oral rehydration beverage and is even useful as an intravenous hydration medium. It has been shown that it prevents heart attack, reduces high blood pressure, dissolves kidney stones and prevents their reoccurrence, fights cancer, relieves constipation, and even retards the aging process. Coconut water contains a variety of nutrients including vitamins, minerals, antioxidants, amino acids, enzymes, growth factors, and other phytonutrients. Among the most interesting components of coconut water there are the plant growth substances, particularly the cytokinins playing a central role in plant developmental processes. However, many substances manifest cytokinin activity and the cytokinin themselves can express anti-cytokinin features. Therefore the purpose of present research was the identification of a main form of cytokinins of coconut water and its activity.

Material and methods. The cytokinin composition of coconut water has been analyzed by independent high-performance liquid chromatography (HPLC) and liquid chromatography–mass spectrometry (LCMS). The effects of coconut water and diphenylurea solution on a number of viable periodontal ligament (PDL) cells have been investigated on the freshly extracted human teeth.

Results. The HPLC and LCMS experiments has been revealed the cytokinin composition of coconut water with 1,3-diphenylurea, trans-zeatin, dihydrozeatin, meta-topolin riboside, N^6-isopentenyladenine and N^6-benzylaminopurine etc. The main form of cytokinins in cocnut water was 1,3-diphenylurea (4,8 mg/L). In this study, 60 freshly