norm described in the textbooks, the imperfection of some surgical approaches that do not take into account individual differences, the surgeons' dissatisfaction with anatomical data provided by bibliographic sources, especially in case of promotion of new surgical techniques.

Aim of the study. To determine the individual anatomical variability of the maxillary sinus depending on age and gender, based on the analysis of bibliographic data and materials of own researches.

**Materials and methods.** This study is based on a analysis of bibliographic data from literature with description of maxilla structure, MS variants and anomalies. 53 images of computed tomography by 3D reconstruction were selected from the database of the Maxillo-Facial Surgery Department of the Institute of Emergency Medicine (Chisinau Municipality) as a tool for researching the individual anatomical variability of MS (topography, presence of septa, pneumaticity, shape and dimensions depending on gender, etc.). The imaging examination has given us the possibility to study the anterior-posterior, lower-upper and transverse diameter of maxillary sinus, as well as the shape, pneumaticity and the presence/absence of septa in the sinus. The comparative MS analysis in people of different age and gender was used as a method of research.

**Results.** The data obtained show that 5 out of 30 women (16.66%) have MS septa, whereas the presence of septa in men was established only in 2 out of 23 (8.69%). Having analyzed the obtained results, we can conclude that in all the patients examined, the MS had the form of a quadrilateral pyramid. In terms of gender particularities, we can state that all sinus diameters are higher in men than in women, furthermore, the right and left MS in the same person are asymmetrical. By using a statistical test, we have obtained p <0.05 for all sinus diameters. **Conclusions.** The data obtained demonstrate that the diameter of the maxillary sinus in men is obviously bigger than the diameter of the maxillary sinus in women. The maxillary sinuses show variations in their degree of pneumaticity and layout of septa. These variants must be known both for the application of proper therapy and for the prevention of complications that may occur in the course of sinusitis.

Key words: individual anatomic variability, maxillary sinus, morphometry

## 255. MORPHOLOGICAL AND IMAGING EVALUATION OF THE UPPER LIMB ARTERIES VARIABILITY

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**Introduction.** The need for a deep morphological study on the issue of variability of the upper limb arteries is dictated by the modern requirements of practical medicine, as the number of surgical interventions, therapeutic and diagnostic procedures on the upper limbs have lately considerably increased.

**Aim of the study.** Identification and description of morphological variability of the upper limb arteries by means of classical dissection and imaging methods dependent on age, gender and side of the body.

**Materials and methods.** The study was performed at the Chair of Human anatomy of Nicolae Testemitanu SUMPh, on 26 formalin-treated upper limbs of adult cadavers (7 of those were bilaterally dissected) and on 34 CT angiographies performed on the device Light speed VCT 64 slides, from the database of the archives of the Euromed Diagnostic Medical Center. The study was carried out on 25 male and 21 female between the ages of 55-70. The macroscopic study was performed according to the anatomical dissection method by Vorobiov V. P., as a result of which the arteries of the upper limb with terminal and collateral branches were highlighted. The

imaging study using the angio-CT method enabled us to establish the real topography of the main arteries and their branches, and the 3D reconstruction revealed their origin.

**Results.** The following arterial variants were identified by anatomical dissection carried out on 14 upper limbs, 9 of those samples were dissected on male cadavers (6 right and 3 left) and 5 on female cadavers (3 right and 2 left). In 3 cases only one arterial variant was determined, whereas at the remaining 11 samples there were multiple variations (about 2-3), revealed bilaterally in 3 and unilaterally in 12 cases. The most variable artery of the upper limb proved to be the brachial artery in 18 cases; numerical variants of the collateral branches – 6 cases; variants of high origin of its terminal branches – 3 cases; presence of common arterial trunks – 4 cases; there were marked out 4 atypical topographical variants and 1 case of brachial artery trifurcation. The axillary artery with branching variants was detected in 9 male and 3 female upper limbs; the bilateral presence was determined in 2 cases and unilateral in 10 (6 right and 4 left); among variants the numerical and common trunks prevalence was highlighted. The angiographic study pointed out anatomical variants in 12 cases; mostly in males (10 cases) and predominantly on the right – 7; the most common was high bifurcation of the brachial artery and common arterial trunks.

**Conclusions.** The variants of the upper limb arteries have undoubted practical significance for diagnostics and surgical management.

Key words: arterial variants, brachial artery

## 256. RENAL VASCULARIZATION: DESCIPTIVE STUDY USING ANGIOGRPHY AND DISSECTION

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**Introduction.** Variants of blood supply to the kidneys were always at special attention. In many aspects, the relevance of the topic can be explained by the presence of a large number of surgical and non-surgical procedures performed on this organ, the number of which continues to grow. **Aim of the study.** Variants of blood supply to the kidneys.

**Materials and methods.** The study was performed on 54 kidneys that were preserved in 10% formaldehyde solution and then carefully dissected; and 94 aortograhy's, obtained from patients, who did not suffer from any renal disease. The obtained data was analyzed using descriptive statistics.

**Results.** One renal artery was found in 45 cases (80.1%) based on dissection and in 63 cases (67.74%) according to angiography. Two renal arteries were found in 11 cases (19.58%) according to the dissected specimens and in 30 cases (32.4%) according to the aortography data. Presegmental division of the renal artery into two branches in 3 cases (5.34%) and three branches - 2 cases (3.56%). Based on the angiography data, presegmental division into two branches was detected in 6 cases (6.45%) and in three branches in 1 case (1.08%). Extrarenal division occurred in 10 cases (17.8%). The superior polar arteries were recorded in 12 cases (21.36%) based on dissection. During angiography the superior polar arteries were in 5 cases (5.38%) and inferior polar arteries as well in 5 cases (5.38%). In comparison with arteries, variants of development of veins are much less common. Accessory right renal vein was detected in 5 cases (9.9%). Late venous confluence was in seven cases (12.46%). We also had a rare case where the adrenal vein drained directly into the upper pole of the kidney (1.78%). In one case (1.78%) we found a left renal vein, which had a retroaortic location. We also found one case (1.78%) of an additional vein on the right and an additional artery on the left.

**Conclusions.** Based on our results renal artery variants are more frequent than venous variants. Accessory renal artery and presegmental branching are seen more often on the right side.