

increased from C₃₋₄ to C₆₋₇ and then a slight decrease was observed ($p < 0.05$) from C₆₋₇ to C_{7-T1}. Disc was less convex from C₃₋₄ to C₅₋₆, while disc convexity index increased from C₆₋₇ to C_{7-T1} ($p < 0.05$). We quantified normal relationships of adjacent intervertebral spaces with the use of established radiological indices.

Conclusions. We documented the α factor for anterior, posterior and mean height on normal subjects as baseline values for future reference.

FUNCTIONAL AND ANATOMICAL CONDITIONS FOR THE PORTO-SYSTEMIC SHUNT IN PATIENTS WITH ASCITES

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Key words: porto-systemic shunt, ascites, cirrhosis

Aim. The aim of the study was to identify functional and anatomical conditions for the portosystemic shunt surgery in patients with ascites.

Material and Methods. 14 patients with liver cirrhosis and refractory ascites underwent a portosystemic bypass surgery. Quality of life was assessed by SF-36 at admission and after 1 and 3 years of surgical treatment. There were 2 groups of patients: 7 with absolutely refractory ascites (no effect of 400 mg of spironolactone and 160 mg of furosemide); and 7 with relatively refractory ascites (prescription of the maximum doses of diuretic drugs was restricted by side effects (encephalopathy, exacerbation of gout, collapse, etc.)).

Results and Discussion. Patients with absolutely refractory ascites showed improvement of life quality after 1 year but significant decrease in 3 years: in 70% of cases ($p < 0.002$) liver transplantation was required. Patients with relatively refractory ascites needed transplantation in 10% of cases, the quality of life significantly improved after 1 and 3 years ($p < 0.0001$). In one year after surgery patients with relative refractory ascites changed the severity of cirrhosis with Child-Pugh score to B and A ($p < 0.001$). The values of SF improved.

Conclusions. Venous system of liver gives anatomical possibilities for the surgical treatment in people with decompensated cirrhosis. According to the obtained data 90% of patients with relatively refractory ascites can delay liver transplantation for 3 years after porto-systemic shunt surgery.

TOPOGRAPHY AND ANATOMY OF THE LYMPH NODES OF THE ABDOMINAL CAVITY IN THE INTERMEDIATE FETAL PERIOD OF HUMAN ONTOGENY

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Key words: human fetus, topography and anatomy, lymph nodes

Aim. Identify the patterns of the formation of topography and anatomy of the lymph nodes of the abdominal cavity in the intermediate fetal period of human ontogeny.

Material and Methods. Torsos of 100 human fetuses of both sexes, aged 16 to 22 weeks, were used. Methods: macromicroscopic dissection; cuts to N. I. Pirogov; histotopographic; study of projection anatomy of the lymph nodes of the abdominal cavity; description of quantitative topography, variational-statistical analysis.

Results and Discussion. The features of parietal and visceral lymph nodes of the abdominal cavity of the fetus at 16–22 weeks of ontogenesis are shown, variants and frequency of their occurrence are described. The character of changes in the holotopic projections of lymph nodes was first established, the dynamics of changes quantitatively described, the range of anatomical differences in skeletal projection was determined, and details of their relationships with surrounding structures were described.

Conclusions. Obtained data on topography and anatomy of the lymph nodes of the abdominal cavity in the fetal period can serve as a basis for the analysis of monitoring of fetal development in later stages of ontogenesis. The suggested skeletotypic levels of the best visualization of the lymph nodes should be used in clinical practice as informative standards for the accurate verification of the findings. Information on quantitative holotopia and projection anatomy of the lymph nodes of the abdominal cavity allows optimizing the performance of diagnostic and therapeutic manipulations in deeply premature newborns and constitute the anatomical basis of developing fetal surgery.

ANATOMICAL PATTERNS OF THE ARTERIO-VENOUS TRIANGLE (BROCQ-MOUCHET) IN THE ADULT HUMAN HEART

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Key words: coronary arteries, great cardiac vein, arterio-venous triangle

Aim. The purpose of this study was to describe the relationship between the branches of the left coronary artery with the great cardiac vein (GCV).

Circumflex artery (CA), anterior interventricular artery (AIA) and GCV form the arterio-venous triangle beneath the left auricle.

Material and Methods. Thirty two formalin-fixed adult human hearts were examined.

Results and Discussion. The arterio-venous triangle was formed in 29 (91%) specimens. Mostly (n=19; 66%) there was «open inferiorly» triangle with the GCV and AIA went in parallel. In the coronary groove the GCV ran over (n=12) or under (n=7) the CA. In 4 cases diagonal artery entered the «open inferiorly» triangle and crossed GCV. Three patterns of the arterio-venous relationship were observed at the 6 of 29 hearts (21%) with «completely closed» triangle. In four cases the GCV was under the AIA and superiorly to the CA. In one specimen the GCV was located superiorly to the both arteries, and in one case the GCV was superiorly to the AIA and under the CA.

Conclusions. «Completely open» triangle was in 4 cases. An «open superiorly» triangle was absent.

SHAPE OF MAMMARY GLANDS IN YAKUT WOMEN IN VARIOUS AGE GROUPS

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Key words: *form of mammary glands, Yakut women, corrective mammoplasty, age aspect*

Aim. Revealing the variability of the form of mammary glands in Yakut women in the age aspect for recommendations on the selection of implants for corrective mammoplasty.

Material and Methods. Morphometry of mammary glands was carried out in adult women of indigenous nationality who applied to a private clinic in Yakutsk for corrective mammoplasty. The examined women were divided into four age groups. The measurements were taken by the system for the selection of breast implants — Body Logic (Mentor Medical Systems B. V. — USA).

Results and Discussion. Analysis of the results of the study of the shape of the breast showed that the round form was most common in women aged 31–35 years, less often at 36–40 years. The round MG (mammary gland) is characterized by a uniform distribution of the gland tissues relative to the nipple-areolar complex, with relative bilateral symmetry. The broad form of MG was most often seen at the ages of 36–40 years, less often at the ages of 20–25. The wide form of the breast is characterized by a wide transverse base and a short vertical length, and an expansion of the nipple-areolar complex. The glandular tissue is denser; the skin varies widely

from dense to flabby. The conical form of MG was more common in the age group of 26–30 years and less often in the first age group. This form of MG is characterized by a conic-shaped apex, directed downwards and to the sides. The glandular tissue is thin; the skin is flabby. In this case, bilateral asymmetry is observed more frequently. The tubular form of MG was less common in all age groups. The tubular form of the mammary gland is characterized by the protrusion of the mammary gland tissue mainly in the area of the nipple-areolar complex, the extended pacifier-areolar complex, the hypertrophy of the nipples, and the pronounced restrictive properties of skin, especially in the lower pole of the mammary gland.

Conclusions. For anatomically substantiated planning of corrective mammoplasty tactics, adequate selection of the implant, and prevention of unwanted postoperative aesthetic complications in the long-term postoperative period, it is critically important to take into account the age and ethnicity of women.

MORPHOLOGY OF THE THYROID GLAND IN THE MALE POPULATION OF YAKUTIA IN DIFFERENT SEASONS OF THE YEAR

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Key words: *thyroid gland, morphometry, structural components, Yakutia, seasons of the year*

Aim. Establishing morphological functional features of the structural organization of the thyroid gland in men of indigenous and non-indigenous nationality of the Sakha (Yakutia) Republic in different seasons of the year.

Material and Methods. The subject of research was thyroid glands of practically healthy men of indigenous and non-indigenous nationality who died from various acute injuries incompatible with life, excluding neck injuries, in the territory of the Sakha (Yakutia) Republic in the period from January 2007 to August 2012. During research, methods of macro- and micromorphometric and immuno-histochemical studies of the thyroid gland were used in the summer and winter periods of the year.

Results and Discussion. Morphometric examination of the thyroid gland in men of indigenous and non-indigenous nationality in different periods of the year (summer, winter) in virtually all glands determined areas with signs of increased and decreased activity — the thyroid gland was in continuous cyclic restructuring with periodic states of activity and rest. The histomorphological changes occurring in the