Material and Methods. 86 mesobasilar skulls (52 males and 34 females) of the first period of mature age (23–35 years) were studied. The coordinates of the anterior (PA), posterior (PP), as well as the most prominent point of the occipital condyle (OC) or lower pole (PI) were determined, while the skull was installed in a stereocraniobasiometer in the Frankfurt plane and the distances from of the studied points to the sagittal (SP), the frontal (FP) and the Frankfurt (FFP) planes were determined.

Results and Discussion. PA OC on the skulls of men is located relative to SP at 12.3 mm, on the skulls of women — at 10.4 mm; FP — 4.3 and 2.1 mm, FFP — 22.9 and 19.7 mm; PI OC on the skulls of men is located relative to SP at 14.8 mm, on the turtles of women — 13.9 mm, FP — 12.7 and 11.1 mm, FFP — 27.3 and 23.0 mm; PP OC on the skulls of men is located relative to SP at 22.8 mm, on the turtles of women — 23.5 mm; FP — 23.1 and 20.7 mm, FFP — 21.6 and 17.3 mm, respectively.

Conclusions. Thus, the coordinates of OC are characterized by sexual dimorphism and bilateral dissymmetry with some right-sided orientation.

MINIMALLY INVASIVE SURGERY OF THE NECK

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Key words: *neck, surgery, access, topography*

Background. Among the existing operations on the neck, various types of resections of the thyroid gland, parathyroidectomy, endoscopic dilatation of the larynx and trachea became the most important among the existing operations on the neck.

Aim. Indications for these operations are the same pathological processes: tumor of the thyroid gland, thyroid nodules, narrowing of the larynx and trachea of various natures, and others.

Material and Methods. These operations are made from different operational accesses: axillary, presternal, retroauricular, lateral, trans oral approach and others. The choice of access is determined by the localization of the process, but depends on the personal experience and inclinations of the surgeon. Therefore, the topographic and anatomical justification for these accesses (the development of the problem of prompt access to the organs of the neck and its experimental justification) is today one of the topical issues. It is caused by the fact that the main contingent of patients with nodular formations of the thyroid gland is women. In particular, the patient pays much attention to the cosmetic aspects of the operation, namely, the condition of the scar.

Results and Discussion. At present, there are no data in the literature on the existence of fundamental studies on an objective comparative evaluation of minimally invasive surgical approaches to the organs of the neck.

Conclusions. We plan to give a comparative topographic and anatomical justification for modern methods of interventions on the neck organs on the basis of objective evaluation criteria to improve the results of surgical interventions.

FIBER TYPE COMPOSITION OF THE RAT ILIOPSOAS MUSCLE WITH REGARD TO THE LEVEL OF ITS ORIGIN

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Key words: *rat, iliopsoas muscle, fiber types, immunohistochemistry, myosin heavy chain*

Background. The iliopsoas of the rat is composed of the psoas major muscle and the iliacus muscle and is generally considered to be a fast muscle. However, previous studies of the fiber type composition of the muscle showed different results.

Aim. Therefore, the aim of our study was to examine the fiber type composition of the rat iliopsoas muscle with regard to its segmental origin.

Material and Methods. At four different levels of its origin, using monoclonal antibodies for myosin heavy chain identification, the percentage and muscle fiber cross sectional areas (CSA) of Type I, IIA, IIB and IIX muscle fibers were identified.

Results. The rat iliopsoas muscle had a predominance of fast muscle fiber types, with the highest percentage and the largest CSA of the fastest IIB muscle fibers. Moreover, our results showed changes in percentages, as well as the CSA-s of muscle fiber types in cranio-caudal direction in the psoas major muscle. There was a decrease of percentages and the CSA-s of type IIB muscle fibers from the cranial towards the caudal part. The results were published in the Journal of Anatomy (J. Anat. 2017. Vol. 230, № 4. P. 542–548.).

Conclusions. The rat iliopsoas muscle is composed of all four muscle fiber types. It is a fast muscle with a predominance of fast type IIB muscle fibers with the largest CSA-s. The composition of the rat psoas major muscles changes in a cranio-caudal direction thus pointing to the more postural role of the caudal part of the muscle.