

Results and Discussion. The proximal lateral reference point of the femur length is the apex of the large trochanter of the femur, from which the line parallel to the linea interepicondylaris femoris is medially drawn. Thus, new methodological approaches have been developed, proposed and introduced in the selection of constant anthropometric points, a rational sequence of LL measurements has been tested.

Conclusions. The developed algorithm is created at the junction of 3D modeling and printing technologies taking into account the functional biomotorics of LL.

PRESERVATION OF BIOLOGICAL SPECIMENS FOR HIGHER AND POSTGRADUATE MEDICAL EDUCATION

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Key words: *anatomy; operative surgery; anatomy specimens; preservation*

Background. Modern educational anatomical specimens have some requirements — high quality, practicality, demonstrativeness, durability, visibility, natural properties, minimal toxicity.

Aim. The trend of recent years — the growing number of students in medical high schools and the growing interest of graduate surgeons to work on biological tissues (cadavers).

Material and Methods. The basis of the dissection in teaching normal anatomy is the use of a material conserved with a formalin-glycerol solution containing 5–10% formalin. Plastination specimens are particularly suitable for practical exercises, examinations; they remain shape, durable, odorless and non-toxic. When carrying out the practical part of the exam, students' Olympiads in anatomy, they use specimens prepared according to the non formalin (latex) method. The last two methods of conservation are convenient for creating expositions of educational museums, enlightening secondary school students, a broad amateur audience.

Results and Discussion. To conduct classes on topographic anatomy, the specimens made by the method of polymeric embalming are used, which makes it possible to create transparent cuts of previously frozen biological objects, frontal and sagittal, the mutual arrangement of organs remains. It becomes popular to «soft» pour cadaver material using alcohol solutions, which allows keeping the shape and topography of organs, elasticity and high mobility of joints. Preliminary injection of dyes is indicated if necessary to visualize the blood or lymphatic system. Such material is used, first of all, for postgraduate training

of surgeons with the purpose of acquiring practical skills. The importance of freezing natural biological objects with a subsequent slow thawing just before the planned event also remains significant, which allows working on natural tissues.

Conclusions. A full range of educational services in the aspect of normal anatomy and operative surgery at university and postgraduate education requires the use of various methods of preparation and conservation of biological specimens.

COMBINED VARIABILITY OF THE ANTERIOR CRANIAL FOSSA WITH ORBITAL FORMS IN THE EXTREME TYPES OF THE BASE OF THE SKULL

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Aim. To identify the combined variability of the anterior cranial fossa with orbital forms in flexi- and platybasilar craniotypes.

Material and Methods. On 100 skulls of adults the method of craniotopometry to study the shape of the anterior cranial fossa according to the magnitude of the longitudinally transverse index, the shape of the orbit by the orbital index.

Results and Discussion. In flexibasilar craniotypes, the broad shape of the anterior cranial fossa is combined with medium-high (64.2%) and medium deep (42.9%), low (21.4%), shallow (35.7%), high (14.3%) and deep (21.4%) orbital forms; mid-wide fovea is combined with medium-high (80%), shallow (60%), high, low (10%), deep, middle-deep (20%); a narrow shape of the fossa in 100% of cases — with medium-high, deep, medium-deep (50%). In platybasilar craniotypes the wide form of the fossa is combined with medium-high (64.3%) and medium-deep (42.9%), shallow (35.7%), low (21.4%), deep (21.4%), high (14.3%); medium-wide fossa is combined with medium-high (80%) and shallow orbit (60%), deep (20%), high (10%), medium-deep (20%), low (10%); the narrow shape of the fovea is 100% combined with medium-high and medium-deep (50%), deep (50%) forms of the orbit.

Conclusions. The results of the study are an indispensable theoretical basis for developing the tactic of the stereotactic transorbital approach to the pathological processes of the anterior cranial fossa.