in acetone, and at last impregnated by local commercial unsaturated polyester resin and ultimately hardening at 50 ºC temperature.

Results and Discussion. The plastinated specimens are clean, curable, odorless, portable and non-toxic, it can be keeps for long durations without any changes the usage of widespread S10 silicon method is high costs so with the aid of using indigenous chemicals it is possible to produced low costs anatomical models for education and for studying anatomy.

THE MORPHOLOGY OF CEREBRAL CORTEX GANGLIONIC LAYER IN ISCHEMIC STROKE

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Key words: *ischemic stroke, cerebral cortex, morphology*

Aim. To reveal morphofunctional changes in the ganglionic layer of the pyramidal cortex of both hemispheres of the brain of people who died as a result of ischemic stroke.

Material and Methods. Samples of cerebral cortex 9 died as a result of left middle cerebral artery ischemic stroke human from 3 areas (1 — adjoining directly to the site of necrosis, 2 — 5–10 cm distant from the previous 3 — the area of the contralateral hemisphere symmetrical hearth) were investigated. Samples were stainedstained with cresyl violetand hematoxylin-eosin; p53 and NSE proteins were detected by indirect immunoperoxidase immunohistochemistry. All samples were examined by light microscopy.

Results and Discussion. Morphometric analysis revealed that the number of damaged bodies of neurons of ganglionic cell layer was greatest in the samples of the ipsilateral hemisphere (zone 1 and 2) and minimal in the zone 3. The relative content of reactively altered nerve cells was the smallest in the samples of the contralateral hemisphere. In the zone 2, all neurons were significantly altered, and in the remote from the border region by 5–10 cm, the number of reactively altered neurons significantly prevailed over the unaltered. Hhe highest number of p53 positive pyramidal cells was observed in zone 2; in zone 1 and 3 the number of labeled cells was comparable.

Conclusions. With the development of ischemic stroke, quantitative and qualitative changes occur in both hemispheres of the brain. Areas of maximum changes are distributed unevenly.

NEW DATA ON HUMAN VERTEBRAL COLUMN STRUCTURE ANATOMY IN THE INTERMEDIATE FETAL PERIOD OF DEVELOPMENT

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Key words: *vertebral column, development, anatomy, fetal*

Aim. To determine the presence of the spinal congenital anomalies and the degree of violation doctors need detailed information on the spinal structures morphology. The purpose of this study was to obtain morphometric data on the structure of the vertebral column on the prenatal stage.

Material and Methods. The study was carried out on 30 fetuses of 16–22 weeks of development using the method of macromicroscopic preparation, method of cuts according to N. I. Pirogov and histotological method.

Results and Discussion. The study of sectional material has established that the vertebral column has already been formed in the 16–22 weeks of development. The lumbar lordosis was detectedin all cases, the cervical lordosis and thoracic kyphosis were present in half of cases. Vertebral foramen were relatively wide and had an oval shape. There was a gradual narrowing of the vertebral foramenfrom L_5 to Sc_5, which has became a narrow slit at the level of coccygeal vertebrae. It was noteworthy that the vertebral arcs were not yet fused with the body. The average value of the transverse dimension of the vertebral body wasincreased from C_1 (2.3±0.65 mm) to L_3 (7.71±1.1 mm), then stabilized through L_4–L_5 and decreased to Sc_5 (1.84±0.43 mm).The sagittal size of the vertebral body wasincreased from C_1 (1.9±0.52 mm) to T_5 (5.95±0.87 mm), then the stabilization to L_3 (5.31±0.91 mm) was observed. The lowest values were established in the sacral part (from Sc_1 — 3.46±0.76 mm to Sc_5 — 1.95±0.37).

Conclusions. Results of research can be used in fetal diagnosis and therapy of deeply prematurely born newborns.

NEW ANATOMICAL DATA ON RECTUM AND ITS RELATIONSHIP WITH BONE STRUCTURES IN FETUSES AT 16–22 WEEKS OF DEVELOPMENT

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Key words: *rectum, bone, developmental anatomy, relationship*

Background. Nursing of deeply premature neonates and progress of the intrauterine operations on the fetal pelvic organs dictate