to access, variable, and often located with facial ones in one area, which are larger in caliber and can «hinder» the search for lower alveolar arteries.

Aim. Therefore, the purpose of our study was the development of the method of ultrasound examination of these arteries and the study of their blood circulation parameters in the norm.

Results and Discussion. We performed ultrasonic triplex scanning of the lower alveolar arteries of 20 healthy people using the «Vivid E9» device of the company «GE Health Care», the blood flow parameters were determined. To interpret the parameters, we compared them with the parameters of the facial arteries. In the study of the facial arteries the following results were obtained: PS — 55.7±0.9 cm/sec, ED — 10.15±0.3 cm/sec, TAMX — 52.0±1.1 cm/s, PI — 1.32±0.06, RI — 0.77±0.03, PS/ED — 2.30±0.1, HR — 35.36±1.9 bpm.

The parameters of the lower alveolar arteries: PS blood flow 57.96±0.7 cm/s; ED 5.47±0.1 cm/s; TAMX 17.22±0.5 cm/s; PI 3.05±0.1; RI 0.91±0.05; PS/ED 10.60±0.2; HR 69.48±0.4 bpm.

Comparing the parameters, the peak systolic velocity, the pulsation index, and the resistance of the lower alveolar arteries were not significantly different from the indices of the facial arteries. The final diastolic blood flow velocity was 2 times lower in the lower alveolar arteries, the mean maximum speed was 2.5 times greater in the facial arteries, the systolic-diastolic ratio was 4 times higher in the lower alveolar arteries, the resistance index was 2 times greater in the lower alveolar arteries.

Conclusions. Thus, we developed a technique for studying the lower alveolar vessels, blood flow indicators were obtained in them, which can be taken as average normal ones.

COMPOSITION OF THE ANTERIOR WALL OF THE EXTERNAL ANAL SPHINCTER IN FEMALE: SUPPORTING SYSTEM BY TWO MUSCLE SLINGS

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Key words: *external anal sphincter muscle, superficial transverse perineal muscle, puborectalis muscle, bulbospongiosus muscle, anal canal*

Background. The external anal sphincter (EAS) is generally recognized as the oval tube of the striated muscle, and it is well known that EAS is partly adjoined by the superficial transverse perineal muscle (STP) anteriorly and the puborectalis (PR) posteriorly. However, it is still unclear the arrangements of the muscle bundles of EAS.

Aim. The aim of this study is to clarify the precise morphological structure of EAS especially the anterior region.

Material and Methods. We used 19 pelvic halves from 11 female cadavers (average 81.3 years old). The muscles of the pelvic floor were dissected from the inferior aspect. Then, the perineal muscles and organs were removed from the coxal bone en bloc to dissect from the inner surfaces.

Results and Discussion. The bulbospongiosus (BS) attached to the anterolateral surfaces of lower part of EAS. The anterior wall of EAS was composed of three muscle bundles, and they were arranged in parallel in order from the top: 1) anterior bundle of PR as the upper bundle; 2) STP and 3) the proper circular muscle. The STP ran on the superomedial surface of BS to run between PR and the proper circular muscle. The anterior bundle of PR and STP were connected with the same muscle bundle on the contralateral sides. The posterior bundles of PR formed a muscle sling on the posterior part of the anal canal.

Conclusions. The anterior region of the anal canal is supported by the two muscle slings by the anterior bundles of PR and STP.

PERIODS OF BRAIN GROWTH IN POSTNATAL ONTOGENESIS

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Key words: *brain, post-natal ontogenesis, morphogenesis, adulthood*

Aim. Aim of the investigation: to determine vital brain size in different periods of post-natal ontogenesis and to reveal the main stages of brain morphogenesis.

Material and Methods. The examining of the patients was carried out in 23 groups from 1 to 25 years of age. Archival MR tomograms of the patients without signs of organic lesions of the brain were verified.

Results and Discussion. The enlargement of the longitudinal size of the brains occurs within 3 periods with different intensity in each. In males the following stages are marked: 1st stage (1–8 years of age), 2nd stage (9–14 years of age), 3rd stage (15–20 years of age). In females these stages have proved to be different: 1st stage (1–6 years of age), 2nd stage (7–14 years of age), 3rd stage (15–21 years of age).

After 1st year of life the length and the width of the head still enlarges distinctly up to 3–4 years of age. At the age of 5–6 years of age growth