

established, the quantitatively described the dynamics of changes, the range of anatomical differences. size characteristics and arcs of vertebrae, vertebral canal, articular processes, upper and lower vertebral notches are limited was determined. Also, data on the features of the structure of intervertebral discs, the joints of the head of the rib, arched and rib-transverse joints were obtained.

**Conclusions.** Information on the anatomy of the thoracic and lumbar spine in the intermediate fetal state of human ontogenesis allows monitoring of fetal development at later stages of ontogenesis. Data on the quantitative morphometry of the vertebrae of the thoracic and lumbar parts of the spinal column at the 16–20<sup>th</sup> week of human ontogenesis allow us to orient the implementation diagnostic manipulations and constitute the anatomical foundation of developing fetal surgery.

#### THE CRANIOMETRIC PARAMETERS OF THE PYRAMID OF THE TEMPORAL BONE AND THE PETROCLIVAL REGION IN VARIOUS FORMS OF THE POSTERIOR CRANIAL FOSSA

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**Key words:** pyramid, temporal bone, posterior cranial fossa

**Aim.** The purpose of the study: was to study the craniometric parameters of the temporal bone pyramid and the petroclival region in various forms of the posterior cranial fossa (PCF) from spiral computed tomography (CT) data.

**Material and Methods.** The length of the upper edge of the pyramid of the temporal bone (LP), the distance between the apexes of the pyramids (DAP), the length of the clivus (LC), the angle of convergence of the pyramid axes (AA), the angle of inclination of the clivus from the plane of the skull base (AC) to 160 CT patients with different forms PCF without the pathology of the bones of the skull and brain. To analyze the data, the program Statistika 10.

**Results and Discussion.** The length of the PCF depended on the LP ( $R=0.97$ ,  $p<0.05$ ). DAP predominated in wide fossa ( $R=0.50$ ,  $p<0.05$ ). The cranial clivus was significantly longer in the long form of PCF, compared with a short ( $p<0.01$ ), greater was the magnitude AC ( $p<0.01$ ). The size of the inner base of the posterior cranial fossa depended on the

magnitude of the AA, which in the wide pit was an average of 5 more than the narrow one ( $p<0.05$ ).

**Conclusions.** The new data on the variability of the craniometric parameters of the apex of the pyramid of the temporal bone and the petroclival region, their dependence on the forms of the PCF, served as an anatomical basis for individual planning of operative approach to tumors of this localization.

#### THE HIP ARTHROSCOPIC SURGERY TO MINIMIZE NEUROVASCULAR INJURY: AN ANATOMICAL STUDY

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**Key words:** arthroscopic surgery, neurovascular injury, an anatomical study

**Aim.** The purpose of this study was to investigate the safety zone without any neurovascular injury to the medial compartment of hip joint through an anatomical method and describe the relationship of the extra-articular anatomic structures from the surface of the hip joint.

**Material and Methods.** Thirty-two fresh specimens from 17 adult Korean cadavers (8 males and 9 females, age range 54–79 years at death) were used for this study. For the measurements, the most superolateral point of the pubic symphysis (PS) and prominent point of the anterior superior iliac spine (ASIS) were identified before dissection. The line connecting the PS and ASIS was defined as a reference line and the PS was a starting point for measurements. All 19 variables measured in this study were related to the femoral head, neck, and surrounding neurovascular structures. The variables were measured according to the x- and y-coordinates in relation to the reference line.

**Results and Discussion.** The femoral head was generally located 39.5 to 71.0 mm on the x-coordinate and located 33.5 to 34.6 mm on the y-coordinate. The junction of the femoral neck and body was located at 52.8 mm on the x-coordinate, and 65.3 mm on the y-coordinate. The junction of the femoral head and neck was located at 47.1 mm on the x-coordinate, and 51.4 mm on the y-coordinate.

**Conclusions.** The location of the medial compartment of the hip joint was located from 38.0% to 43.0% on the x-coordinate and located from 5.1 to 6.5 cm. These results of this study provide detailed anatomy for arthroscopic hip surgeons.