

The mucous membrane of the main bronchi contains a relatively large number of smooth muscle cells. The height of the epithelial layer is 32-36 microns, the nuclei of its cells occupy mainly the apical position, and the protoplasmic part of the cells adjoins the basement membrane. As in the earlier stages of development, the bronchial tree is lined with high multilayered epithelium all the way. In the system of a pulmonary artery, its lobular, segmental and subsegmental branches are accurately recognized.

As a result, most of during this period, there is a further complication of branching of a bronchial tree owing to what epithelial tubules occupy a little bigger area of a anlage of the body than its mesenchymal part. The interlobular septa are much better expressed and are represented by a delicate fibrous connective tissue.

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TOPOGRAPHIC AND ANATOMICAL FEATURES OF THE PERONEAL ARTERY IN 4-MONTH-OLD HUMAN FETUSES

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The study of the variant anatomy of the vessels of the lower extremities from the practical and theoretical point of view remains relevant and promising because the number of surgical procedures using methods of revascularization of soft tissue defects of the lower leg has recently increased. Significant importance is attached to the development of new types of transplants in the area of the branch of the peroneal artery.

The study aimed to determine the topographic and anatomical features of the peroneal artery in human fetuses at 4 months. The study was performed on 14 preparations of human fetuses 4 months 81.0-135.0 mm parietal-coccygeal length without external signs of anatomical malformation or abnormalities in the development of the lower extremities by macromicroscopic preparation and morphometry.

As a result of the study, we consider it appropriate to divide the trunk of the peroneal artery into three segments, as each of them has certain topographic and anatomical features. The first segment of the peroneal artery (proximal part) – is from the beginning to the passage of the trunk of the peroneal artery in the ankle-popliteal canal. The second segment (middle part) corresponds to the topography of the peroneal artery in the inferior muscular-peroneal canal. Moreover, the length of the second segment of the peroneal artery is directly proportional to the length of this canal. The third segment of the peroneal artery (distal part) is the segment of its trunk from the point of exit from the inferior muscular-peroneal canal to its branch to the terminal branches. Note that the length of the third segment of the peroneal artery in the studied fetuses varies, which is due to the level of branching of the peroneal artery to the terminal branches.

Variants of the topography of the proximal segment of the peroneal artery, one of the most common, are usually associated with the sources of its origin. It has been established that the peroneal artery can originate from three sources. The initial division of the posterior tibial artery, the posterior tibioperoneal trunk, or be a direct extension of the popliteal artery. In most of the studied fetuses, the peroneal artery departed from the posterior tibial artery, but there is no reason to consider it exclusively a branch of it.

Topographic and anatomical features of the second segment of the peroneal artery are determined by the number of branches that originate here and the possible variants of their anastomoses. Variants of the topography of the third segment of the peroneal artery are associated not only with the level of branching of its terminal branches but also with anastomoses between the distal parts of the posterior tibial artery and peroneal artery. Rare variants of doubling of the peroneal artery were found in fetuses of 95.0 and 110.0 mm of parietal-coccygeal length, and in both cases, the peroneal artery originated from the tibioperoneal trunk.

Data on the topographic and anatomical features of each segment of the peroneal artery will help clinicians to improve modern approaches to endovascular interventions.