plete discoid morphology (58%). The lateral menisci were having 'C shape' morphology in 16 cases (32%) and crescent shape in 5 cases (10%).

Conclusions. The present study observed various shapes of medial and lateral menisci in the human knee joint. The incidence of discoid lateral meniscus was 58%. However all these were incomplete discoid in morphology and the complete discoid meniscus was not observed in the present study (0%). The discoid medial meniscus was not observed in the present study (0%). We believe that the data of the present study is enlightening to the orthopaedic literature and incomplete discoid lateral meniscus may be considered as a normal variant.

MORPHOLOGICAL CHARACTERISTICS OF THE ANTERIOR COMMUNICATING ARTERY

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Key words: *anterior communicating artery, brain, anatomy, origin, diameter*

Aim. Cerebral circulation, especially arterial, in recent decades has attracted the interest of anatomists and clinicians. The anterior communicating artery acts as an anastomosis between the left and right anterior cerebral arteries. The aim of this study was to determine the morphological and topographic characteristics of the anterior communicating artery and its variations.

Material and Methods. The investigations of anatomical characteristics of the anterior communicating artery are made on 133 human brains without cerebrovascular pathology, from both sexes at age from 23 to 68. Brains were fixed in a 10% solution of formaldehyde, and the obtained material was analyzed using a stereoscopic light microscope.

Results and Discussion. The length of the anterior communicating artery ranged from 0.6 to 7.6 mm, with mean value of 2.6 mm. The diameter ranged from 0.5 to 5.1 mm, with a mean value of 2.0 mm. In 54% of the cases anterior communicating artery was presented as a single artery connecting the anterior cerebral arteries. The most common variations of the anterior communicating artery were *Y* or *V* shaped (frequency 29%), plexular (frequency 8%), duplication (frequency 4%) and common trunk of anterior cerebral arteries with absence of anterior communicating artery (frequency 4%).

Conclusions. Detailed anatomical knowledge of the anterior communicating artery is important when considering vascular surgery in the area of the anterior portion of the circle of Willis, since is the most common site of intracranial aneurysm formation.

TRANSPLANTATION OF THE REVASCULARIZED TRACHEA IN THE EXPERIMENT AND, FURTHER, IN THE CLINIC WITH A GOOD REMOTE RESULT

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Key words: *transplantation, trachea, thyreotrial complex, experiment, vital organs*

Transplantation of vital organs has now become a daily reality. However, unlike many other organs, in clinical practice there is no reliable transplant of the trachea, capable of replacing it with total lesion. This is due to the peculiarities of the anatomy of the trachea, as well as its constant contact with the external environment, leading to infection of the trachea. The goal of the research was to develop an anatomical model of transplantation of a revascularized trachea with the aim of its clinical use for the tracheal defects replacement after extensive resection. In the anatomical theater were performed 109 experiments in which the anatomy of the vascular pedicle of the trachea was studied, the area of perfusion of the tracheal wall through the thyroid arteries was determined. Thus was developed a new method of transplantation of the revascularized trachea in the composition of the thyreotrial complex. Was developed the donor selection stage of the organ, which was carried out in 17 cases. Preference was given to the «fast» version of the fission of the thyreotrial complex, which is convenient to use in the multi-organ fence in the donor after the death of the brain. Recipient stage (n=5) was performed after subtotal resection of its own trachea. The blood supply was restored by superimposing vascular anastomoses of the lower thyroid arteries and the veins of the donor complex with the receptor vessels. The choice of recipient vessels was carried out individually in each specific case, depending on the location of mediastinal and transplant structures. In the experiment were determined on animals the permissible time of thermal ischemia of the thyreotrial complex, the preservative solution and the features of reperfusion injury. Thus, for the first time a technique for transplantation was proposed of the trachea in the composition of the thyreotrial complex with one-stage revascularization through the lower thyroid vessels. This technique used us in the clinic. The patient is a 37-year-old man with a diagnosis The operation was done for 37-year-patient with diagnosis: «Afterthracheostomic subtotal cicatricial stenosis and malacia trachea. The membranous part defect