

the separation of tentorium cerebelli from the occipital bone.

Results and Discussion. The brain extracted by this method contains a neurosecretory complex of the diencephalon and two patches of the dura mater: one — with the hypophysis and cavernous parts of the internal carotid arteries with the preserved pituitary stalk, the other — with a tentorium cerebelli with a direct venous sinus and an epiphysis. The brain drug extracted by this method preserves the natural relationship between the hypophysis, the hypothalamus, the thalamus, the epiphysis and the main sources of blood supply — the cavernous and supraclinoid segment of the internal carotid arteries, the basilar arteries, the anterior, middle and posterior medullary arteries, the anterior and posterior connective arteries.

Conclusions. Such a preparation can be used as a neurosecretory transplant.

CLINICAL MORPHOLOGY OF THE ASCENDING AORTA

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Key words: ascending aorta, fat pad, postoperative atrial fibrillation, hemorrhage, glomus

Aim. The current investigation was initiated to meet the modern demands of cardiovascular surgery and advanced angiology, to contribute to the use of less traumatic treatment approaches.

Material and Methods. Three hundred fifty-six ascending aortas taken from the human corpses, aged from 16-week fetuses to 96 years, were studied. Histological methods, interstitial injection, Schiff reagent staining, and immune histological detection of lymphatic endothelium were applied.

Results and Discussion. It was found that in blood supply of the ascending aorta the vasa vasorum internae take part, along with coronary, bronchial, mediastinal arteries, and the artery accompanying the right vagus nerve. The intramural blood vessels topography correlates directly with the ascending aorta fat pad localization. These vessels originate on the concave side of the ascending aorta, in proximity with the arch of aorta, above the fat pad. The arteries, 1 to 7 in number make their way inferiorly to the right reaching the fat body of the ascending aorta where they form anastomoses with other vascular sources. In all the cases the route of these vessels passes through the glomus located inside the aortic fat pad ensuring their rich vascularization. The AAs glomus characteristics are similar to the carotid ones: their location is closely allied to arterial, venous and

lymphatic vessels. There were recorded dispersed forms of the respective structures. We have found glomus structures in all cases, and at various ages. There should be noted some age changes regarding their structure. It is manifested by a decrease of the basic cells and an increase of supporting ones. It is not clear why they are found in absolutely healthy and younger people, whereas in presenile and senile-aged persons they often show no changes, although persons died of cardiovascular diseases. We established the fat pad of the ascending aorta to contain the lymph vessels, sometimes nodes. In most cases it is crossed by the lymph collector from the region of the sinus node. The correlation of the trajectory of a given collector to a fat pad was studied for its different localization. Affecting the fold integrity in its location on the anterior surface of the AAs is sure to lead to lymph stasis in the sinus node area and to give rise to atrial fibrillations.

Conclusions. 1) A series of macro- and micro-structural features of the ascending aorta were revealed, particularly those relating to its blood supply, nerve supply, and lymphatic drainage. 2) The functional role of Rindfleisch fat body was also stressed. 3) The obtained evidence explain the enigma of postoperative atrial fibrillation and abundant haemorrhage, occurring more frequently in surgical interventions on the ascending aortic segment. 4) Recording of data on the histotopography of the nervous, blood and lymphatic structures of the ascending aorta in cardiac and aortic surgery is a reliable way to prevent postoperative complications.

MICROSCOPIC CHARACTERISTICS OF EXTRADURAL NERVE ROOTS ANOMALIES

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Background. Raising number of unsuccessful disc hernia operations highlighted the importance of knowledge of different types of nerve roots anomalies. Various anatomical studies aimed on elucidating them were performed worldwide.

Aim. Our cadaverous study has focused on microscopic features of found extradural nerve root anomalies.