Kushnir H., Reznik N. MORPHOLOGICAL VARIETY OF THE ASCENDING AORTA FAT PAD Scientific adviser PhD, Associate Professor Pasiuk H.A.

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Objective. Epicardial adipose tissue is present in normal healthy individuals. It is a unique fat depot that, under physiologic conditions, plays a cardioprotective role. However, excess epicardial adipose tissue has been shown to be associated with prevalence and severity of atrial fibrillation. An important anatomical concept needing clarification is that of the lymphatic drainage of conduction tissue. The sinoatrial node lymphatic collector and other lymphatic vessels from right heart passes through aortic fat pad of the ascending aorta and are the most frequently damaged lymphatic vessels during cardiac surgery.

Aim: to discover morphological and topographical variants of the aortic fat pad.

Materials and methods. The study was performed on 9 human adult hearts, fixated in formalin. The shape and location of the aortic fat pad on the ascending aorta were studied. The length and width of the heart, aorta, and aortic fat pad were measured using a morphometric method.

Results and discussion. The study found different locations of the aortic fat pads on the anterior view between the ascending aorta and pulmonary trunk and on the medial border between right auricle and aorta.

The study showed that 30% of the examined aortic fat pads shared a similar disk shape the others present individually different undefined shape.

It was established that fat pad width is 79.00 (50.00-88.00) mm; and the aortic fat pad length is 69.00 (57.00-80.00) mm.

A Spearman's rank-order correlation was run to determine the relationship between length and width of aortic fat pad. There was a strong, positive correlation between aortic fat pad length and width which was statistically significant (rs = 0.69, p < 0.05).

Conclusions. The study reviled an integrative relationship between length and width of the aortic fat pad. The study shows variability in sizes and shapes of the aortic fat pad.