

## **ОСОБЕННОСТИ СТРОЕНИЯ ПЕРИКАРДИАЛЬНЫХ СИНУСОВ**

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## **FEATURES OF PERICARDIAL CANALS BUILDING**

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Modern level of heart, pericardium and magisterial vessels of mediastinum surgery development needs more accurate data about surgical anatomy of this region. In case of recommendations of transpericardial accesses to organs and vessels of mediastinum, as the rule, are marked only clinical data's outcomes, without taking to attention compliances, which can be in operative incomes near heart, pericardium and mediastinum's vessels. In search of new, more rationally accesses and methods to organs and vessels of thorax matter and individual differences between organs and systems in the field of operation's wound in depending on body's position and characteristics of the pericardium in the thorax (high or low). Literature data of different authors of surgical anatomy of the heart vessels radix very contradictory.

In the posterior part of the pericardium, between its parietal and visceral leaf, which cover the radix vessels of the heart, are located pericardial canals - left and right. In the process of research, right pericardial canal is longer in 3-4 times than the left pericardial canal (about 78%), in 22% of the observations - left pericardial canal was shorter than the right only in 2 times.

Directed vertically downward from the right entrance to the transverse sinus of pericardium to the right and down borders of the entrance to the oblique intervenes inversion at the front edge of the inferior vena cava. It has three walls - right, left and back. Right and down walls formed by parietal layer, and the left – by visceral layer of pericardium covering in-pericardial segments of the superior vena cava, right pulmonary veins and the inferior vena cava. Canal's length is individually variable at different people, ranging from 10 to 15.5 cm, and the persons, who are asthenias have longer channel (14.5-15.5 cm), and in patients who are hyperstheneas - the smallest length (10.0 - 11.5 cm). The length of the right pericardial canal depends on the severity of pericardial departments within vessels of the heart and the radix of the area of fixing the pericardium on the back surface of the heart. Materials of research have shown that the canal length is directly proportional to the length of the vessel, in-pericardial radix of the heart and is inversely proportional

to the square of fixing the pericardium on the back surface of the heart. With greater severity of square which fix the pericardium on the back surface of the heart and blood vessels of his radices, the length of the smallest vessels in-pericardial departments and respectively right pericardial canal expressed worse; it is shorter and narrower. At least area of fixing the pericardium visceral layer on vascular radix of the heart and on the back surface of its greatest length, in-pericardial divisions of the upper and lower vena cava and right pulmonary veins canal wider, longer and more available at different surgical interventions in this area.

Has an oblique direction, is located on the left input into the transverse sinus of the pericardium and down a few left to the lower-left border of the entrance to the oblique intervenes inversion in the lower left of pulmonary vein. Canal walls are: left - in all cases parietal layer of the pericardium (or left side wall of the pericardium), right - a visceral layer of pericardium, covering by obliterated crease of top of the left vena cava and the left pulmonary veins. In 63% of observations right wall canal was formed by both left pulmonary veins (upper and downer), and 37% - only common trunk of the left pulmonary veins, on the back - the back wall of the pericardium. The canal length is individually variable in different individuals and varies within 3.0-5.5 cm. In the majority of cases (83% of) the length of the canal was 3.0-3.5 cm, in 17% - 3,6-5 5 cm. Individuals, who are asthenias have the maximum length of the channel (4.0-5.5 cm); in patients who are hypersthenes - the smallest (3.0-3.5 cm). Surgical anatomy of the right and left pericardial canals is differing at different forms of structure of the posterior wall of the pericardium, since it has many creases or a little amount of creases and forms, pericardial canals can open differently in their severity and different number of inversions them. Into the right canal when pericardium has many creases form open volvulus: right back to aorta, the upper and lower volvulus of superior vena cava, right intervenes and right inversion of inferior vena cava. When the form has a little amount of creases form in open canal, as a rule, only the upper right back to aorta and volvulus of superior vena cava. In the left pericardial canal, which has many creases form the back wall of the pericardium and deep turn-out: volvulus of obliterated crease of the top left of vena cava, left intervenes and volvulus of lower left pulmonary vein.