

injection, angiographic and statistical methods of investigation were used.

Results and Discussion. The valve of the coronary sinus was revealed in 70% of cases (21/30), in 30% (9/30) the flap was absent. Catheterized coronary sinus valves were found in 80% (17/21) or 57% (17/30) of all observations. Thus, in 87% (26/30) cases, catheterization is possible, and for 13% (4/30), an alternative route is needed for the left ventricular electrode. As an alternative, the left lower phrenic vein flowing into the inferior vena cava in 60% of cases (72/120) are considered. Free or catheterized with a diameter of 5 mm or more — in 36.6% of cases (44/72) and conditionally catheterized with a diameter of less than 5 mm — in 23.3% of cases (28/72). Venous sinus as the main way of implantation of the left ventricular electrode with cardiac resynchronization therapy can be suitable for catheterization in 87% of patients, and for 13% of patients an alternative way of its implementation is needed. The left inferior phrenic vein, which flows into the lower vena cava, freely or conditionally catheterized, can serve as such an alternative pathway.

TOPOGRAPHO-ANATOMICAL CHANGES IN ABDOMINAL CAVITY AND RETROPERITONEAL SPACE AFTER NEPHRECTOMY

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Key words: *nephrectomy, topography of the abdomen and retroperitoneum*

Aim. Purpose of research — obtaining new data on changes in the topography of the abdomen and retroperitoneum after nephrectomy.

Material and Methods. In 105 patients with kidney cancer, the topography of the abdomen (liver, ascending and descending colon, spleen, duodenum) and retroperitoneum (pancreas, aorta, inferior vena cava) were studied depending on the location of the tumors and their size. A group of 25 patients was studied as a control without the pathology of the kidneys. Computed tomography on the device «LightSpeed RT16» (General Electric, USA) and morphometry for the analysis of abdominal and retroperitoneal displacement after operation were used. The examinations were performed before and after 6–8 days, 3–4 months and 6–8 months after nephrectomy.

Results and Discussion. After right-sided nephrectomy, the surgical bed is replaced by the ascending colon (level L_I–L_V), the head of the pancreas (level Th_{XII}–L_{II}), the inferior vena cava (level Th_{XII}–L_I), the descending part of the duodenum (level Th_{XII}–L_I) moving backwards; ascending colon (up to Th_{XII} level) moving upwards; the right lobe

of the liver (level Th_{XI}–L_I) moving medially. After left-sided nephrectomy, the remaining part of the retroperitoneum is filled with the descending colon (level Th_{XII}–L_{IV}) displacing posteriorly, the body and tail of the pancreas (level Th_{XII}–L_{II}) displacing posteriorly and medially, spleen (level Th_{XI}) displacing medially.

Conclusions. On the basis of morphometry data, a quantitative description of the displacement of organs and structures of the abdomen and retroperitoneum towards the postoperative bed to the place of the removed kidney with a malignant tumor is given.

A STUDY OF THE ANATOMY OF THE LEVATOR ANI MUSCLE IN VIVO THROUGH THE CREATION OF THREE-DIMENSIONAL IMAGES

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Key words: *perineum, segmentation, m. pubococcygeus, m. iliococcygeus m. coccygeus, m. levator ani*

Aim. The aim of the study was to study the basic forms of the muscle structure that lifts the anus in men and women of the first and second adult periods and the older age group according to CT and MRI data.

Material and Methods. In our work we used data from computer and magnetic resonance tomograms of 57 patients aged 20 to 70 years. In the «Autoplan» system using a precision technique in semi-automatic mode, three-dimensional models of the muscle that lifts the anus are created.

Results and Discussion. The results of the research: three-dimensional models of the muscle that lifts the anus are created and described: for young women and men of all ages, the keel-shaped and funnel-like shape of the muscle that raises the anus is characteristic; and for women of advanced age — horseshoe.

Conclusions. The creation of three-dimensional models of a muscle that lifts the anus using the Autoplan system allows not only studying the anatomy of the investigated area in vivo, but also planning the course of operations, especially with the use of reticular implants, using the non-exhaustive methods of surgical correction of the pelvic floor. The disadvantages of this method include the inability to conduct research in an upright position (modern computer and magnetic resonance tomographs in Russia are designed for examining patients only in a horizontal position), as well as the impossibility of automatic segmentation in view of the low contrast