

Retroperitoneal Laparoscopic Surgery in the Urologic Practice

Introduction and Objective: Modern minimally invasive laparoscopic procedures are used instead of open surgeries in cases of numerous urologic diseases. In most cases, a percutaneous transabdominal access is used.

Material and Methods: In urologic clinical practice, we prefer the retroperitoneal approach, as the most adequate and safe for interventions in the retroperitoneal space. We have gained extensive clinical experience of percutaneous retroperitoneal laparoscopic surgeries in such cases as solitary and multiple simple renal cysts, polycystic kidneys and parapelvic multilocular cysts (overall more than 600 patients), nephrectomy for hypoplasia, secondary wrinkled kidney and terminal hydronephrosis (46 patients), pyelo- and ureterolithotomy of stones in the upper and middle third of the ureter (total 29 patients), resection of the aberrant vessels of the lower kidney segment with hydronephrosis (38 patients), partial nephrectomy and resection of tumors of the kidney (28 patients), resection and removal of cysts and tumors of adrenal glands (26 patients). At the same time we used the transabdominal laparoscopic access in similar diseases.

Results: Our practical experience in using retroperitoneal approach in laparoscopic surgery shows clinical effectiveness and prospects of the chosen approach. The duration of the operation varied from 7 to 160 minutes. There were no intra- and postoperative complications in all our observations. In our opinion, laparoscopic procedures on the organs of the urinary tract, should now become an alternative to most open surgeries. At the same time, the use of retroperitoneal approach for a number of these diseases, in our opinion, should be, in turn, the preferred alternative to transabdominal laparoscopic access, as compared to the last, it significantly reduces the likelihood of damage to the integrity of the abdominal cavity, its infection, the development of postoperative adhesion process, provides the conditions for a more adequate drainage, etc.

Conclusion: Laparoscopic surgery is a minimally invasive and effective method of surgical treatment of urologic diseases, and along with the appropriate expertise it should be used more extensively in the national urologic practice.