

Editorial Comment

This is a nice overview of the increasing number of biomaterials which can be used for and around the urinary tract. However, ongoing research is an absolute must because biocompatibility, interactions with body tissues and subsequent scarring are far from ideal with the current materials.

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UROLOGICAL ONCOLOGY

Tumor seeding in urological laparoscopy: an international survey

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Purpose: During the last 10 years laparoscopy has been applied to treat most urological pathology including malignancies. There has been concern regarding peritoneal dissemination and port site metastases. We undertook a survey to assess the incidence of this occurrence.

Materials and Methods: A total of 50 international urology departments with experts in laparoscopic urological surgery were contacted for this study. Each site was asked to complete a 2-page survey regarding the volume of laparoscopic urological procedures and port site recurrences.

Results: Nineteen sites elected to participate. A total of 18750 laparoscopic procedures were performed, of which 10912 were for cancer. These included 2604 radical nephrectomies, 559 nephroureterectomies, 555 partial nephrectomies, 27 segmental ureterectomies, 3665 radical prostatectomies, 1869 pelvic lymph node dissections, 479 retroperitoneal lymph node dissections, 336 adrenalectomies and 108 procedures listed as other. Tumor seeding was reported in 13 cases (0.1%), including 3 nephroureterectomies for transitional cell carcinoma, 4 nephrectomies (incidental transitional cell carcinoma), 4 adrenalectomies for metastases, 1 retroperitoneal lymph node dissection for testicular cancer and 1 pelvic lymph node dissection for cancer of the penis. Port seeding occurred in 10 cases (0.09%) and peritoneal spread in 3 cases (0.03%).

Conclusions: The incidence of tumor seeding after laparoscopic oncological surgery is rare and does not appear greater than what has been historically reported for open surgery. Tumor seeding seems to be most commonly related to the removal of high grade tumors and deviation from oncological surgical principles.

Editorial Comment

Laparoscopic surgery has evolved to a reliable and safe procedure in urology – if indicated correctly. This paper shows the safety of the procedure in regard to oncological procedures.

Two facts however deserve emphasis and should be kept in mind. First, patients with port metastases might not return to the surgeon or the center where the initial procedure was undertaken, so a certain number of non-reporting is certain. Second, the majority of implantation metastases (n = 7) stems from transitional cancer. This tumor entity therefore might be considered hazardous for laparoscopic procedures and open surgery might be preferable here.

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Extended radical lymphadenectomy in patients with urothelial bladder cancer: results of a prospective multicenter study

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Purpose: Previous studies demonstrate a positive correlation between postoperative survival and the extent of pelvic lymphadenectomies in patients with bladder cancer. However, the distribution of nodal metastases has not been examined in sufficient detail. Therefore, we conducted a comprehensive prospective analysis of lymph node metastases to obtain precise knowledge about the pattern of lymphatic tumor spread.

Materials and Methods: Between 1999 and 2002 we performed 290 radical cystectomies and extended lymphadenectomies. Cranial border of the lymphadenectomy was the level of the inferior mesenteric artery, lateral border was the genitofemoral nerve and caudal border was the pelvic floor. We made every effort to excise and examine microscopically all lymph nodes from 12 well-defined anatomical locations.

Results: Mean total number and standard deviation of lymph nodes removed was 43.1 +/- 16.1. Nodal metastases were present in 27.9% of patients. The percentage of metastases at different sites ranged from 14.1% (right obturator nodes) to 2.9% (right paracaval nodes above the aortic bifurcation). By studying cases of unilateral primary tumors or with only 1 metastasis we observed a preferred pattern of metastatic spread. However, there were many exceptions to the rule and we did not identify a well-defined sentinel lymph node.

Conclusions: We strongly recommend extended radical lymphadenectomy to all patients undergoing radical cystectomy for bladder cancer to remove all metastatic tumor deposits completely. The operation can be conducted in routine clinical practice and our data may serve as a guideline for future standardization and quality control of the procedure.

Editorial Comment

These authors performed a meticulous lymphadenectomy together with cystectomy in patients with bladder cancer. In analogy to previous approaches in retroperitoneal lymphadenectomy for testis cancer, the lymph nodes were sampled and ordered according to their anatomic origin.

In general, these data provide interesting information on the rate and the extent of lymph nodular metastases in bladder cancer. Several issues however deserve comments. First, patients with pT1 category (n = 57) only had 1.8 % metastases, whereas pT2a patients had 10.7% and pT2b had 22.2% metastases. All other pT – categories had around 40%, whereas pT4b had 80 % metastases. The percentage of lymph node metastases on all 290 patients was around 3 – 8 % over all anatomical sides, with the exception of the ipsilateral and contralateral paravesical area (14% and 11%). If patients had nodal metastases at level 1 (next to the bladder) 57% of patients of group were also positive at level 2 and 31 % at level 3.

In conclusion nodal metastases next to the bladder indicate systemic disease. To my opinion, this data would rather provide the rationale for systemic chemotherapy in nodular positive patients.

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