

ENDOUROLOGY & LAPAROSCOPY

Comparison of different extraction sites used during laparoscopic radical nephrectomy

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Purpose: Laparoscopic radical nephrectomy is commonly performed for renal tumors that are not amenable to nephron sparing treatment. A number of techniques for intact specimen extraction are used. The development of incisional hernias from the extraction site is a known but infrequent delayed complication. We analyzed different extraction sites and risk factors for such hernias.

Materials and Methods: We retrospectively analyzed a cohort of patients undergoing laparoscopic radical nephrectomy with intact specimen extraction through 3 sites. Patients and operation specific parameters were included with particular attention to factors predisposing patients to incisional hernia, including chronic obstructive pulmonary disease, diabetes mellitus, chronic steroid use and a high body mass index.

Results: A total of 181 nephrectomies were performed in 175 patients and 175 kidneys (96.7%) had malignancy. Mean tumor size was 4.9 cm. Mean followup was 28.8 months. Extraction was done from a lower quadrant site in 55 patients (31.4%), from the umbilical site in 58 (33.2%) and from a paramedian site in 62 (35.4%). Patients with paramedian and lower quadrant extraction sites were older ($p = 0.016$), and had a higher body mass index ($p = 0.001$) and greater specimen weight ($p = 0.003$). In 4 patients an incisional hernia developed. An incisional hernia was significantly associated with the paramedian extraction site ($p = 0.015$).

Conclusions: Incisional hernias may occur as a delayed complication of laparoscopic radical nephrectomy. This complication most commonly develops at the extraction site. In patients with a high body mass index using a paramedian extraction site is a significant risk factor for incisional hernia formation.

Editorial Comment

Laparoscopic radical nephrectomy has evolved and questions such as intact organ extraction versus morcellation were answered by different investigators recommending intact extraction for different reasons. Unfortunately, larger extraction sites may cause incisional hernia. The authors have demonstrated that when patients are obese the optimal site for extraction is the paramedian site since it may decrease the chance for incisional hernia after extraction.

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Laparoscopic management of endopelvic etiologies of pudendal pain in 134 consecutive patients

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Purpose: The feasibility of the laparoscopic transperitoneal approach to the pelvic somatic nerves was determined for the diagnosis and treatment of anogenital pain caused by pudendal and/or sacral nerve root lesions.

Materials and Methods: The records of 134 consecutive patients who underwent laparoscopy for refractory anogenital pain were retrospectively reviewed. All neurosurgical procedures, such as neurolysis/decompression of the pudendal nerve and the sacral nerve roots or neuroelectrode implantation to the sacral plexus for postoperative neuromodulation, were done via the laparoscopic transperitoneal approach to the pelvic nerves. **Results:** A total of 18 patients had Alcock's canal syndrome and decompression was successful in 15. Due to failed decompression 3 patients underwent secondary sacral laparoscopic neuroprosthesis implantation with a decrease of at least 50% on the pain visual analog scale. Sacral plexus lesions or radiculopathies, most commonly postoperative lesions and retroperitoneal endometriosis, were found in 109 patients who underwent laparoscopic neurolysis of the sacral plexus. The final outcome depended on the etiology. Of patients with postoperative nerve damage 62% had a decrease in the mean +/- SD preoperative visual analog scale score of from 8.9 +/- 2.9 (range 7 to 10) to 2.4 +/- 2.3 points (range 0 to 4) at the time of article submission at a mean followup of 17 months (range 3 to 39). Because of failed decompression, 8 patients underwent secondary sacral laparoscopic neuroprosthesis implantation and a decrease in the pain visual analog scale score was achieved in 5. Of patients with an endometriosis lesion of the sacral plexus 78% had a decrease in the mean preoperative visual analog scale score of 8.7 +/- 1.9 (range 8 to 10) to 1.1 +/- 0.7 points (range 0 to 2) at the time of article submission at a mean followup of 21 months (range 2 to 42). All 6 patients with vascular entrapment of pelvic nerves achieved complete relief. The last 7 patients underwent primary sacral laparoscopic neuroprosthesis implantation with at least a 50% decrease in the pain visual analog scale score in 4. **Conclusions:** Our findings emphasize that in patients with seemingly inexplicable anogenital pain, especially after failed treatment for Alcock's canal syndrome, laparoscopic exploration of the pelvic nerves must be done for further diagnosis and therapy before prematurely labeling the patients as refractory to treatment.

Editorial Comment

Laparoscopic minimally invasive approach has been applied in Urology for benign, oncological diseases, reconstructive surgery; but this novel approach to manage endopelvic etiologies of pudendal pain is a pioneer approach to a complex urogynecological problem.

The author describe a protocol that when followed seemed to successfully deal with the complex pelvic pain disease.

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IMAGING

Renal cell carcinoma: dynamic contrast-enhanced MR imaging for differentiation of tumor subtypes--correlation with pathologic findings

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Purpose: To retrospectively evaluate whether the enhancement patterns of pathologically proved clear cell, papillary, and chromophobe renal cell carcinomas (RCCs) measured on clinical dynamic contrast agent-enhanced magnetic resonance (MR) images permit accurate diagnosis of RCC subtype.