Introduction to Laparoscopy Through Radical Cystectomy: The First Consecutive 22 Cases of a Single Junior Surgeon

Introduction and Objective: We report the first consecutive 22 laparoscopic radical cystectomies by a surgeon without previous experience in laparoscopy. We evaluate if the laparoscopic radical cystectomy (LRC) is a suitable introduction to laparoscopy.
Materials and Methods: Between May 2010 and July 2011, 22 patients underwent LRC with pelvic lynphadenectomy. All surgeries were carried out by a single junior surgeon, tutored in the first two cases by experienced surgeons from another hospital. Urinary diversion was done extracorporeally through specimen extraction incision. A prospective database was created.
Results: The sample included 20 men and 2 women, mean age 69 (55 to 82), all except one with at least pathologic T2 stage in the previous TUR. Urinary diversion was ileal conduit in 21 cases and the other underwent cutaneous ureterostomy after synchronic nephroureterectomy. There were no intraoperative complications except bleeding. There were no conversions to open surgery. Mean operating time was 321 (240-390) minutes, mean blood loss was 600 (100-1000) ml, and the postoperative stay was 10.6 (6-28) days. Lynphadenectomy removed a mean of 18 (10-31) nodes. There were 2 positive soft margins in patients with massive infiltration (pT4a and pT3b) and one urethral margin with CIS. Twelve patients (55%) experienced postoperative complications, evaluated at 30 and 90 days using the Clavien system. The most frequent complication was the need for blood transfusion, and there were only two patients with major complications: posoperative bleeding that needed reintervention and later ICU management because of cardiac failure (3b+4a), and another reintervention because of evisceration (3b). There was no direct relation between preoperative parameters (Charlson comorbidity index, ASA index, body mass index, previous abdominal surgery, neoadjuvant chemotherapy or age) and complications rate, bleeding, operating time or the postoperative stay. The more experience acquired the lower operating time, bleeding, complication rate and postoperative stay, but this tendency was statisticlly insignificant and clinically irrelevant.
Conclusion: The LRC is a good option for tackling laparoscopy, despite the lack of experience. In our experience the learning curve in LRC doesn't produce relevant variations in the outcome. In our experience the variability of cases makes predicting the outcome in individual patients difficult.