

A Simple Prophylaxis for Postoperative Inguinal Hernia After Laparoscopic Prostatectomy

Introduction and Objective: Inguinal hernia is a late complication of radical retropubic prostatectomy (RRP) and laparoscopic radical prostatectomy (LRP). Here, we compared the occurrence of inguinal hernia with that of LRP. We also established a novel and simple method of preventing post-LRP inguinal hernia.

Materials and Methods: We examined 272 and 370 patients after RRP and LRP, respectively, between April 2004 and December 2011. As prophylaxis for inguinal hernia after RRP, we released the bilateral spermatic cord from the peritoneum before suturing the wound to prevent the intestinal tract coated with peritoneum from pushing through the internal inguinal tract (Urology 76: 1083, 2010). We applied prophylaxis for inguinal hernia to 101 patients (RRP prophylaxis (+) group) and compared the results to those in 171 patients who did not receive prophylaxis for inguinal hernia (RRP prophylaxis (-) group). We also applied the same prophylaxis for inguinal hernia in LRP by using the transperitoneal approach as that for RRP. For LRP prophylaxis of the inguinal hernia, we released the bilateral spermatic cord from the peritoneum in the prevesical space to 30 patients (LRP prophylaxis (+) group).

Results: Inguinal hernia developed in 20 (11.7%) and 26 (7.6%) of the RRP and LRP prophylaxis (-) patients, respectively. All postoperative inguinal hernias were indirect. We examined patients with and without inguinal hernia in the LRP prophylaxis (-) groups. Among patients with and without inguinal hernia in the LRP group, age, initial prostate-specific antigen, operative duration, and blood loss did not significantly differ. The BMI was significantly lower in patients with inguinal hernia than in those without (22.0 ± 2.5 vs. 23.2 ± 2.7 ; $p < 0.05$). The prophylactic procedure against inguinal hernia in LRP was accomplished within 5 minutes (234 ± 26 seconds) without any side effects. Inguinal hernia did not develop in any patients in the RRP or LRP prophylaxis (+) groups.

Conclusions: Indirect inguinal hernias similarly develop as a complication of LRP and RRP. A low BMI affects the incidence of inguinal hernia after LRP. We developed a novel and simple method of preventing inguinal hernia after LRP, the outcome for which is excellent. This technique should be applied after transperitoneal robotic-assisted laparoscopic prostatectomy.