

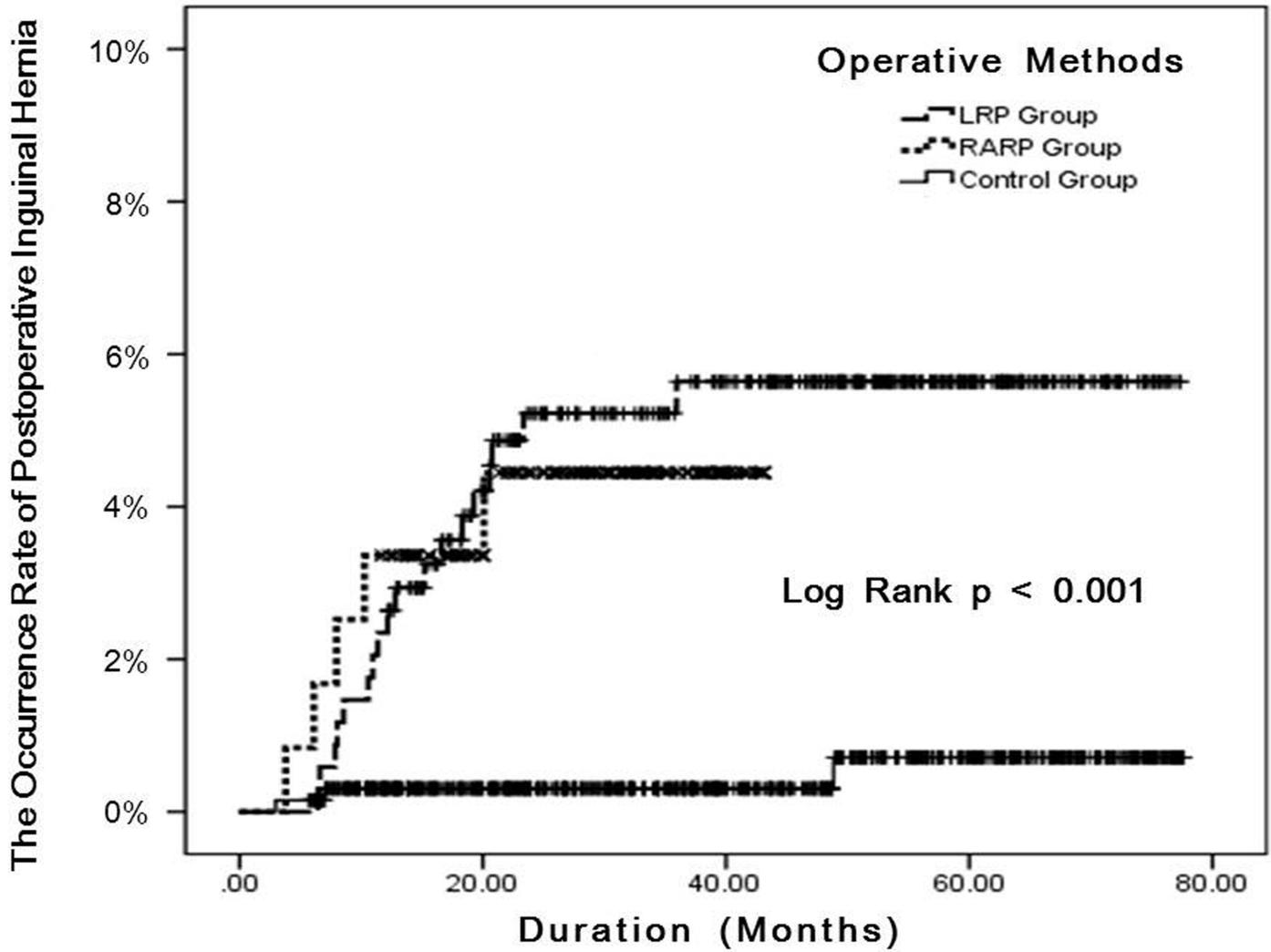
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Introduction & Objectives: To investigate the cumulative incidence and risk factor of postoperative inguinal hernia (PIH) in patient undergone radical prostatectomy (i.e., laparoscopic prostatectomy [LRP] and robot-assisted laparoscopic prostatectomy [RARP]).

Materials & Methods: This study was based on 1,124 patient undergone radical prostatectomy or transurethral resection of bladder tumor, from 2011 to 2016. We first compared the cumulative incidence of PIH in the radical prostatectomy group (460: LRP, 341; RARP, 119) and control group (664; transurethral resection of bladder tumor), and then we analyzed the risk factors (age, operative methods, previous abdominal operative history, the thickness and width of external oblique muscle and rectus muscle, the thickness of abdominal subcutaneous fat layer at Hesselbach's triangle level, body mass index, prostate specific antigen, operative time, specimen weight, Gleason score, and pathology T-stage) of PIH in radical prostatectomy group.

Results: The median follow-up period in this study was 39.55 months. In Kaplan–Meier curve analysis, the cumulative incidence of PIH was 5.3%, 4.2%, and 0.5% for the LRP, the RARP, and the control group, respectively ($p < 0.001$). Multiple logistic regressions showed that the thickness of external oblique muscle and width of rectus muscle were significant risk factors ($p < 0.001$ and $P = 0.027$).



Conclusions: PIH is considered as one of the complication of LRP and RARP. Additionally, we suggest that if the thickness of the muscle is less than 7.28 mm, thoughtful surgical manipulation is needed for radical prostatectomy, and care should be taken to determine whether the hernia occurs during the follow-up.