

PE37 Effect of puboprostatic ligament reconstruction on continence recovery after robot-assisted laparoscopic prostatectomy

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Introduction & Objectives: Urinary incontinence is among the most common complications affecting robot-assisted laparoscopic prostatectomy (RALP) patients' post-operative quality of life. Several surgical modifications have been introduced to improve continence including the puboprostatic ligament reconstruction. In this study, we introduce our novel technique of anterior reconstruction including the puboprostatic ligament reconstruction inspired by Burch Corpususpension as a last step of RALP and its effect on the continence recovery postoperatively.

Materials & Methods: In this retrospective study, the data of 288 consecutive RALPs from 2016 to 2018 were analyzed and the patients were divided in two groups; the control group "C Group" (144 patients) and the anterior reconstruction group "R Group" (144 patients). After radical prostatectomy with posterior reconstruction and anastomosis, additional novel anterior reconstruction step was performed only among R Group. The novel Burch suture was performed after conventional anterior reconstruction (figure). The primary endpoint of this study was to compare both groups as regards the post-operative continence rates. Urinary continence (0-1 security pad) rates were evaluated at time of 1 month (T1), 3 months (T3), 6 months (T6) and 12 months (T12) post-operatively. The multivariate logistic regression was performed to analyze the factors influence the recovery of continence.

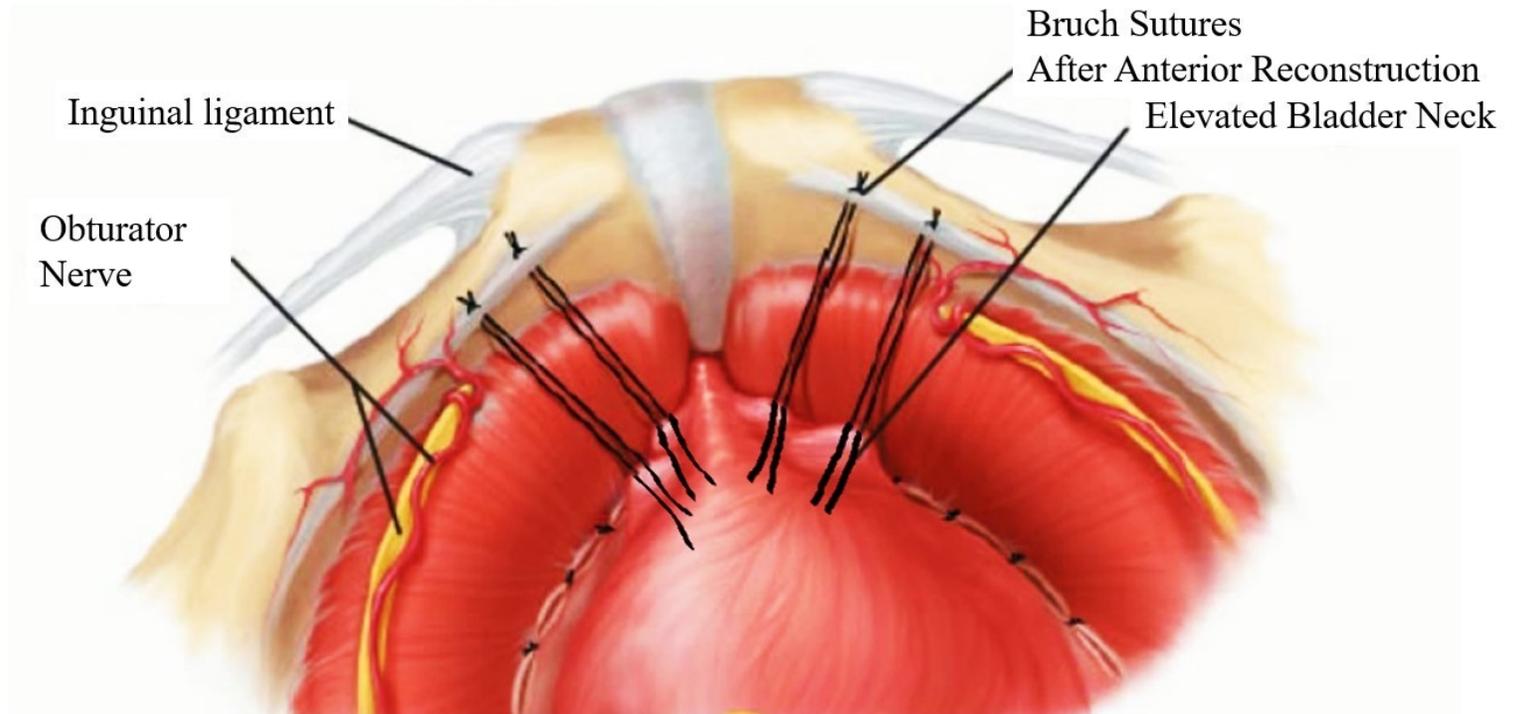


Figure. The novel technique of Burch Suture

Results: The median age was 68 yrs (48-80) and the rate of continence recovery was 36.5%, 63.2%, 84.0% and 92.7% at T1, T3, T6 and T12, respectively. The rate of continence significantly at earlier period from T1 (46.5% vs 26.3%) to T3 (75.7% vs 50.7%) was better among R group than C group. However, the continence recovery rate at T6 or T12 was not different between groups. The absence of anterior reconstruction was independent risk factors after adjusting the influence of the other covariants including old age (>65 year), non-nerve sparing, bladder neck reconstruction and the short membranous urethra length (<12 mm), long operation time (>3 hour) at T1 and T3 according to multivariate logistic regression model.

Conclusions: Our novel anterior reconstruction fastens the continence recovery for up to 3 months. Our study supports the theory that our novel technique provides better immediate continence and shorten the time to continence for RALP patients.