

PUBIS-RECTUM LENGTH IS A NOVEL FACTOR ASSOCIATED WITH EARLY RECOVERY OF CONTINENCE FOLLOWING ROBOT-ASSISTED LAPAROSCOPIC PROSTATECTOMY.

Hypothesis / aims of study

Urinary incontinence remained a significant complication after radical prostatectomy and led to impaired quality of life. Membranous urethral length (MUL) measurement prior to radical prostatectomy has been identified as an independent factor for recovery of continence and is recommended prior to surgery (1). However, some patients with a long MUL are bothered by sustained incontinence. Our aim is to identify novel independent preoperative risk factors associated with UI after robot-assisted radical prostatectomy (RARP).

Study design, materials and methods

This study included 71 patients (mean age, 68 years) who underwent RALP at our institute. Preoperative factors included age, BMI, PSA, prostate volume, MUL and pubis-rectum length (as pelvic floor length around urethra) measured using MRI (Fig. 1). We evaluated urinary incontinence at 1, 3, 6, 12 months following RARP using questionnaire. Outcome included complete continence and one or less pad use daily for minimal incontinence. We built a model using the LASSO logistic regression to evaluate association between patients' demographic and incontinence.

Results

Continence rate was 18% at 3 and 35% and 6 months after surgery, and one or less pad use rate was 34% and 70%, respectively. Using the LASSO logistic regression model, MUL and pubis-rectum length were identified for recovery of continence at 6 months (odds ratio [OR], 1.4 per mm change, $p=0.0012$, 1.2 per mm change, $p=0.0019$, respectively) (Fig. 2). Prostate volume were not independent factor (OR, 0.96, $p=0.09$)

Interpretation of results

Pubis-rectum length is a novel independent factor for early recovery of continence following surgery. Moreover, impact of pubis-rectum length on the recovery of continence is almost equivalent to MUL.

Concluding message

Our findings suggest that preoperative measurement of pubis-rectum length is helpful to predict incontinence after the surgery.

Fig.1 Pubis-rectum distance

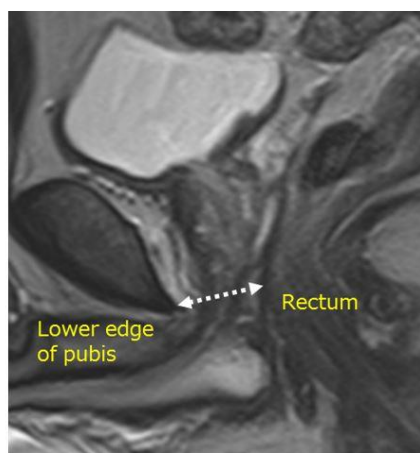
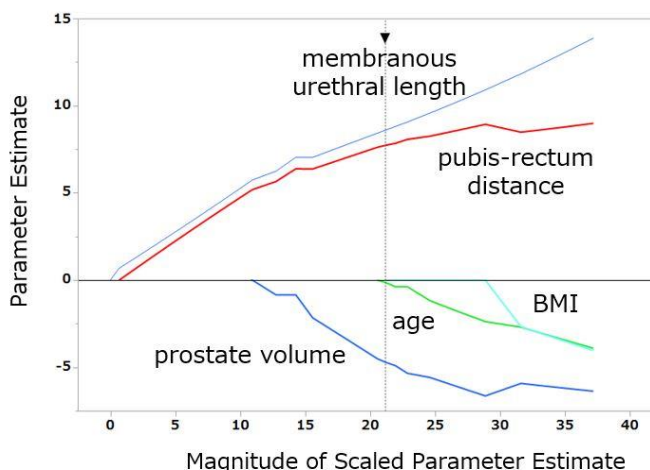


Fig 2. LASSO coefficient profiles of clinical parameters. A vertical line is drawn at the value chosen by 5-fold cross-validation.



References

1. Tutolo M et al, Eur Urol. 2017.

Disclosures

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