

## THE VARIATION OF LUTS AFTER THE RECONSTRUCTIVE PELVIC SURGERY AND THE SIGNIFICANCE OF PREOPERATIVE URODYNAMIC EXAMINATION

### Hypothesis / aims of study

To evaluate the impact of reconstructive pelvic surgery(RPS) with or without tension-free vaginal tape-obdurator on urinary incontinence symptoms and lower urinary symptoms(LUTS) in patients with pelvic organ prolapse(POP);

Try to investigate the urodynamic characters and possible high risk factors of POP patients together with OAB.

### Study design, materials and methods

213 POP patients who underwent RPS during 2007.1-2009.12 are enrolled in this prospective study. The women completed the Pelvic Floor Distress Inventory at baseline and again at least 6 months after surgery. Postoperative changes in symptoms of urinary urgency, frequency, and stress urinary incontinence were assessed. The association between between urodynamic diagnosis of detrusor overactivity etc. and urinary frequency, overactive bladder symptoms in those patients was also analysed, as well as the possible risk factors of OAB.

### Results

Data were analyzed from 193 subjects who were followed up for more than 6 months after the surgeries and completed the questionnaires. 165 patients (165/193, 85.5%) had LUTS preoperatively and 105 (105/193, 54.4%) were still with LUTS after the surgeries. There was significant difference in the incidence of LUTS pre- and postoperatively, no matter the overall incidence or that of each specific symptoms, e.g. frequency (57.0%/25.9%) , urgency(51.8%/28.0%), leakage while coughing(50.3%/15.0%), small amount of urine leakage(44.6%/14.5%), voiding difficulty (34.7%/23.3%), urinary endless sense(49.2%/19.7%) and hand assisted urination(31.1%/2.6%) ( $p<0.05$ ) .

Statistically improvements in PFDI and UDI were both noted as well ( $P<0.05$ ).

175 patients underwent the urodynamic examination preoperatively while 91 were diagnosed as OAB. When comparing with the other 84 non-OAB patients, there was no significant variation in their urodynamic parameters ( $p>0.05$ ).

Before the operations, when comparing the demographics and clinical characteristics of patients with OAB( $n=91$ ) and without OAB ( $n=84$ ) , we found the two group differed significantly in patients' age and hypertension prevalence ( $p=0.05$  and  $0.04$  respectively). While there was no significant difference in the patients' body weight index(BMI), severity of POP and diabetes prevalence.

After the RPS, 63 patients got rid of OAB symptoms(group C) while 34 patients still suffered from continuing and de novo OAB symptoms(group D). When comparing the demographics and clinical characteristics of the two groups, there were significant differences in Aa, Ap and TVL of the POP-Q system and no significant difference in other parameters.

### Concluding message

RPS may alleviate the urinary symptoms for POP patients with LUTS.

Preoperative urodynamic examination may not be able to help pick out those POP patients combined with OAB.

Patient's age and hypertension maybe associated with the incidence of OAB.

### Disclosures

**Funding:** no **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** The Ethics Committee of Peking University People's Hospital **Helsinki:** Yes **Informed Consent:** Yes