PREOPERATIVE PRESSURE FLOW STUDY IS A PREDICTIVE FACTOR FOR IMPROVED OVERACTIVE BLADDER SYMPTOMS AFTER ANTERIOR VAGINAL WALL PROLAPSE REPAIR

Hypothesis / aims of study
Pelvic organ prolapse (POP) often accompany overactive bladder (OAB) symptoms including urinary frequency, urgency, incontinence. Community based studies showed higher prevalence of OAB in women with POP although the pathophysiological mechanisms underlying OAB symptoms in conjunction with POP are not well characterized. It has been known anterior vaginal wall prolapse (AVP) repair improve lower urinary tract symptoms including OAB symptoms, while a subset of patients still complain OAB symptoms after AVP treatment and are needed anticholinergic medication. It is unclear which factor can predict the improvement of OAB symptoms after AVP treatment until now, however recent study reported persistent OAB symptoms after AVP repair were not related to demographic factor rather to preoperative higher PdetQmax. The purpose of this study was to determine wheather preoperative urodynamic parameter is a valuable predictor for persistence of OAB symptoms after AVP repair or not.

Study design, materials and methods
OAB patients with concomitant POP-Q stage III,IV anterior vaginal wall prolapse undergoing surgical repair were included and were divided arbitrarily by group A(high PdetQmax, BOOI≥20) and group B(low PdetQmax, BOOI<20) by preoperative urodynamic results. Patients those having a concomitant incontinence surgery within 1 year prior to baseline evaluation, neurological disease, urinary tract infection, tumor, urolithiasis were excluded in order to eliminate possible role as a confounding variable. All patients recorded OAB symptom score (OABSS) questionaire before surgery and repeat after sufficient (more than 6 months) post-operative follow-up period. Wilcoxon signed-rank test was used for statistical analysis with significance determined at p value < 0.05

Results
From October 2009 to March 2011, 45 patients were involved in two medical center. The mean age was 63.6±8.2 years. 20 patients were classified in group A and 25 patients in group B. Group B showed significant decrease of symptom score in daytime frequency(P<0.01), urgency(P=0.01), urge incontinence(P=0.03), nocturnal frequency(P=0.02) and total(P=0.01) after prolapsed repair. Group A did not show significant decrease of symptom score in daytime frequency(P=0.21), urgency(P=0.21), urge incontinence(P=0.14), total(P=0.07) but showed significant decrease of nocturnal frequency(P=0.04).

Interpretation of results
Our results showed prolapse repair was not enough to resolve concomitant OAB symptoms in high preoperative PdetQmax group. On the other hand, had a role in resolving OAB symptoms in low preoperative PdetQmax group.

Concluding message
Preoperative pressure-flow study can predict the change of overactive bladder symptoms after AVP repair. While AVP repair results improvement of OAB symptoms generally, patients are still needed anticholinergic medication in high preoperative PdetQmax group.

References