

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 whether 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 \geq 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) questionnaire 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 \pm 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

1. Neurourol. Urodynam. 29:1414–1418, 2010.
2. UROLOGY 68: 318–323, 2006.

Specify source of funding or grant	no
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	KEPCO medical foundation Hanil general hospital IRB Hangang sacred hospital hallym university IRB
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes