THE SURGICAL OUTCOMES OF TRANSOBTURATOR TAPE IN PATIENTS WITH STRESS URINARY INCONTINENCE CONCOMITANT WITH OVERACTIVE BLADDER

Hypothesis / aims of study
Although the majority of women suffering from stress urinary incontinence (SUI) have coexisting symptoms of overactive bladder (OAB), there is a paucity of literature concerning about the effect of the transobturator tape (TOT) to the symptoms related with OAB. We evaluated the change in OAB symptoms in patients undergoing the TOT.

Study design, materials and methods
Among 314 patients who underwent TOT for SUI between June 2009 and Dec 2013, a total of 107 patients who suffered from not only SUI but also OAB were enrolled in this study prospectively. All patients enrolled in this study were confirmed SUI by urodynamic study (VLPP<120cmH₂O) and showed the symptoms related OAB that included 1 time or more urgency with frequency of micturition 8 times or more per day. All patients were asked to complete the Korean version of overactive bladder questionnaire short form (OAB-q) and three days voiding diary pre-operatively and post operative 3months. In addition to the OAB-q and voiding diary, all patients were asked self reported satisfaction scale (5 degree ; cure to very worsening) to assess the surgical outcome of the sling operation.

Results
The mean age was 54.4 ± 6.3 and mean VLPP was 92.7 ± 13.6 cmH₂O, respectively. The daytime micturition times (11.4/day to 9.6/day, p=0.041) and functional bladder capacity (214.6ml to 266.8ml, p=0.031) were significantly improved while the nocturnal voiding times (1.6/day to 1.4, p=0.164) and urgency episodes (1.9/day to 2.1/day, p=0.191) were not changed in the analysis of voiding diary. The overall improvement related with OAB symptoms estimated by OAB-q was also identified in this trial. (Total score 21.4 to 17.4, p<0.001) The surgical outcome of TOT for SUI was feasible with reasonable subjective satisfaction scale (cured were 94 and improved were 8 while no interval change was only 5 patients). Fifty three patients (49.5%) were required the medication or other additional treatment for remnant OAB symptoms postoperative 3months while others were not.

Interpretation of results
SUI and OAB often occur concomitantly and recent studies have demonstrated a significant association between SUI and OAB not only in the epidemiologic point of view but also in the pathophysiologic mechanism. There are still debates on the effect of TOT to the symptoms related OAB, and moreover, there are several reports about the ‘de novo urgency’ after TOT that might have a negative impact to the OAB. Although the our results demonstrated the overall positive effect of TOT related to the symptoms of OAB, We have to consider the possible negative impact of TOT to the detrusor overactivity.

Concluding message
TOT had positive effects on the management OAB in patients concomitant with SUI in this study. However the long-term follow up data and more large scale trials will be necessary to support the good result maintenance and to determine the clinical acceptability of TOT in the management of patients with SUI and OAB.

Disclosures
Funding: none Clinical Trial: No Subjects: HUMAN Ethics Committee: IRB of Hallym University Helsinki: Yes Informed Consent: Yes