CAN PREOPERATIVE VALSALVA LEAK POINT PRESSURE PREDICT OUTCOME OF MID-URETHRAL SLINGS?

Hypothesis / aims of study
The Valsalva leak point pressure (VLPP) have been considered an objective parameter for stress urinary incontinence (SUI) severity after McGuire et al demonstrated VLPP as a reliable method for assessing the urethral sphincter mechanism in 1993. The present study compared the treatment outcomes of tension-free vaginal tape (TVT) and transobturater tape (TOT) for intrinsic sphincter deficiency (ISD) and nonintrinsic sphincter deficiency (NISD) patients in SUI.

Study design, materials and methods
From March 2004 to December 2007, a total of 109 incontinent women with SUI treated by either TVT procedure (n=52) or TOT procedure (n=67) were included in this study with follow-ups for at least 6 months postoperatively. The patients underwent preoperatively urodynamic study including VLPP. Pad test was done preoperatively for all patients, while postoperative pad test was done only in patients who complained urine leakage at any time of visit. If postoperative urine leakage was decreased more than half of preoperative urine leakage, that was regarded as "success", while decrease less than half of preoperative urine leakage was regarded as "failure".

Results
Mean follow-ups were 13±5 months (6-20) for all patients. There were no significant differences found in demographics between ISD and NISD group: mean age, BMI, parity, and menopausal status (p>0.05). When total cases were stratified into two groups (ISD as VLPP < 60cmH2O vs. NISD as VLPP > 60cmH2O), 43 (39.5%) patients were diagnosed as ISD and 66 (61.5%) patients were not (NISD). The overall success rates were 81.4% for ISD group, while 78.8% for NISD group and no significant differences were noted (p=0.583). With the results from 6 months follow-up data, no significant differences in success rates emerged when patients of both groups were matched for TVT or TOT procedures: ISD group (89% vs. 76% p < 0.083); NISD group (72% vs. 83% p < 0.162).

Interpretation of results
The success rates of two groups which were stratified according preoperative VLPP showed no significant differences matched for TVT or TOT procedures. This means making decision between TVT and TOT according preoperative VLPP may not affect the result of the anti-incontinence surgery.

Concluding message
Preoperative Valsalva leak point pressure may not help in making decision what procedure will be chosen for SUI patients.