Hypothesis / aims of study
Prevalence rates of urodynamic urinary incontinence (USI) subtypes and their related clinical and urodynamic findings in women with ≥ pelvic organ prolapse quantification stage II cystocele are important for clinical consultation, especially for occult USI. Misdiagnosis of occult USI before cystocele repair might lead to occurrence of de novo stress urinary incontinence after cystocele repair. Thus, the aim of this study was to elucidate the above findings and between-group associations.

Study design, materials and methods
Between November 2011 and January 2017, medical records of all women with ≥ stage II cystocele who underwent urodynamic studies in a medical center were reviewed. ANOVA test and post-hoc testing with bonferroni’s correction were used for statistical analysis. USI is noted during filling cystometry and is defined as the involuntary leakage of urine during increased abdominal pressure, in the absence of a detrusor contraction. The recruited patients with cystocele were classified into three groups (i.e., evident USI, occult USI and no demonstrated USI) according to pad weight results before and after prolapse reduction.

Results
A total of 480 women with ≥ stage II cystocele were found to have evident USI (n=297, 61.8%), occult USI (n=76, 15.8%) and no demonstrated USI (n=107, 22.3%) (Table 1).

Stage of cystocele and uterine prolapse, pad weight results before and after prolapse reduction, the volume at strong desire to void, UDI-6, IIQ-7 and most domains of Kings’ health questionnaires were significantly different between the occult and evident USI groups (Table 1 & 2).

Except pad weight results, and stage of coexistent uterine prolapse, there were no statistical differences in clinical and urodynamic parameters between the occult and no demonstrated USI groups (Table 1 & 2).

Stage of coexistent uterine prolapse = 3 was the most strongly predictive cutoff value for predicting occult USI with receiver operating characteristic curve area of 0.60 (95% CI = 0.52 to 0.68, sensitivity = 30.3%, specificity =78.5%, Fig 1) in the subpopulation of ≤ 1 g pad weight before reduction.

Interpretation of results
Women with cystocele in the occult USI group had higher stage of cystocele and coexistent uterine prolapse, larger bladder capacity and better health-related quality of life, compared with evident USI. Nonetheless, except the stage of coexistent uterine prolapse, there were no statistical differences in clinical and urodynamic parameters between the occult and no demonstrated USI groups.

Concluding message
The incidence of concomitant occult USI is not uncommon in women with ≥ stage II cystocele. Except the stage of coexistent uterine prolapse, clinical and urodynamic findings are not different between the occult and no demonstrated USI groups in women with ≥ stage II cystocele. Thus, for diagnosing occult USI, past testing with prolapse reduction remains an important tool, especially for women with ≥coexistent stage III uterine prolapse.

Disclosures Statement: none