REPEAT OPERATION AFTER FAILED STRESS INCONTINENCE SURGERY: CAUSES AND OUTCOMES

Hypothesis / aims of study
We evaluated the causes of failed stress incontinence surgery and outcomes following repeat operation.

Study design, materials and methods
Of 285 consecutive women who underwent anti-incontinence surgery between July 2006 and June 2009, we retrospectively reviewed the records of 34 patients (43±7.9 years; range, 43-70) in whom an initial anti-incontinence surgery failed, who then underwent a repeat operation at our institution and who were available for follow-up evaluation. The causes of repeat operation and outcomes following repeat operation were evaluated.

Results
Of 34 patients who underwent repeat operation, 19 initially had a stress incontinence surgery at our institution and 15 at other hospital. In 19 patients, the types of initial stress incontinence surgery were transobturator vaginal tape procedure (TOT) in 10 patients (5.9%, 10/169), pubovaginal sling operation in 6 (6.7%, 6/89), tention-vaginal tape operation (TVT) in 2 (8.3%, 2/24), and Burch colposuspension in 1 (33.3%, 1/3). The causes of repeat operation were synthetic mesh erosion in 15 patients (78.9%, 15/19), recurrent stress urinary incontinence in 2 (10.5%, 2/19), and urinary retention in 2 (10.5%, 2/19). In 15 cases of synthetic mesh erosions, primary closure with trimming of non-viable tissue was done in 10 patients, and wound repair using dermofat graft was done in 5. In 2 cases of recurrent stress urinary incontinence, each patient became complete dry through pubovaginal sling operation and injection therapy, respectively. In 2 cases of urinary retention, some of colposuspension suture was removed in Burch operation and tension of synthetic mesh was released through anterior vaginal incision.

In 15 patients who underwent initial stress incontinence surgery at other hospital, the causes of repeat operation were recurrent stress urinary incontinence in 9 patients (60.0%, 9/15), synthetic mesh erosion in 4 (26.7%, 4/15), and intravesical mesh protrusion in 2 (13.3%, 2/15). In patients with recurrent stress urinary incontinence, 2 patients had a urethral diverticulum, and then became complete dry after diverticulectomy. The other 7 patients became continent after pubovaginal sling operation. In 4 cases of synthetic mesh erosion, primary closure was done in 2 patients and wound repair using dermofat graft was done in 2. Patients with intravesical mesh protrusion underwent removal of mesh and pubovagianl sling operation after two months. After repeat operation, mean follow-up period was 27.5±11.4 months (range, 9-43). During follow-up period, there was no complication or recurrent stress urinary incontinence.

Interpretation of results
There was no difference in the repeat operation rate according to each type of operation. The cause of reoperation were mainly because mesh erosion and persistent urinary incontinence. In case of mesh erosion, wound repair using a dermofat graft was easy and effective. After repeat operation, there was no significant complication or recurrent stress urinary incontinence.

Concluding message
When recurrent stress urinary incontinence or synthetic mesh erosion occurs after anti-incontinence surgery, repeat operation can be a viable option.