LONG-TERM OUTCOME OF THE MONARC PROCEDURE (OUTSIDE-IN TRANSOBTURATOR SLING) FOR STRESS URINARY INCONTINENCE: OBJECTIVE CURE RATE AND SUBJECTIVE SATISFACTION OVER 7-YEAR FOLLOW-UP

Hypothesis / aims of study
Midurethral sling using synthetic mesh has become one of the treatment choices for the female with stress urinary incontinence (SUI). There are two types of procedure, tension-free vaginal tape (TVT) and transobturator tape (TOT). TVT and TOT seem to be effective and safe treatment for SUI. Previous studies about the long-term success rate after TVT procedure showed 84-95%. A study about 4-year follow-up success rate after TOT showed 69.5%. However, the researches about long-term outcomes after TOT is lacking compared with TVT. Therefore, we evaluated the long-term objective continence rate, subjective satisfaction, and lower urinary tract symptoms (LUTS) in the female with SUI and followed up over 7 years after TOT, especially using MONARC which is outside-in procedure.

Study design, materials and methods
This study included total 83 female patients with SUI who had undergone MONARC and were followed up over 7 years. The preoperative evaluation included a careful history taking, physical examination, consecutive voiding diaries and urodynamic study. The postoperative evaluation included an evaluation of continence by Sandvick’s Incontinence Severity Index (cure: complete dryness during physical activity), questionnaire regarding subjective patients’ satisfaction (satisfaction with the postoperative status, so-so, dissatisfaction with the postoperative status), and LUTS.

Results
Mean valsalva leak point pressure (VLPP) was 79.2 (21-125) cmH2O by urodynamic study. Eleven patients showed intrinsic sphincter deficiency (ISD) by the definition of VLPP less than 60 cmH2O. Postoperative mean follow-up period was 89.4 (84-110) months. The mean patient age who followed up more than 7 years was 60.2 (40-83). Postoperative cure rate was 75.9 (63/83) %. The 20 (17/83) % of patients showed improvement compared with the preoperative SUI and 3.6 (3/8) % complained recurrent SUI. One of the recurred patients had preoperative ISD and another patient was undergone TVT procedure at 6-year after MONARC procedure. The 72.3 (60/83) % of patients satisfied with the postoperative status and the 9.6 (8/83) % did not satisfied. The reasons of dissatisfaction were recurrence of SUI (n=3) and postoperative LUTS except SUI (urgency, urge incontinence, or weak urinary stream, n=5). Preoperatively, 39 (32/83) %, 51 (43/83) %, and 35 (29/83) % of the female with SUI complained frequency, urgency, and urge incontinence, respectively. At 7-year follow up after MONARC, 13 (11/83) %, 15 (12/83) %, and 2.4 (2/83) % of the female complained frequency, urgency, and urge incontinence, respectively.

Interpretation of results
At 7 years after MONARC, objective cure rate was 75.9 % and therefore, MONARC seems to be one of the effective surgical treatment options for the female with SUI. Since the subjective satisfaction rate (72.3 %) was similar with the objective cure rate (75.9 %), complete dryness after MONARC is considered as the important factor for the female with SUI to judge the outcome. However, among the patients showed dissatisfaction about the outcome, the reasons were revealed as not only recurrence of SUI but also the LUTS except SUI (urgency, urge incontinence, or weak urinary stream).

Concluding message
Compared with the previous studies, similar long-term continence rate was observed. Therefore, MONARC procedure seems to be one of good surgical treatment options for SUI. In addition, more concern is necessary about the changes of LUTS as well as SUI because LUTS may influence the subjective satisfaction and quality of life.

References

Disclosures
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