

EARLY RESULTS OF REMEEX[®] (EXTERNAL MECHANICAL REGULATION) SLING SYSTEM FOR FEMALE PATIENTS WITH RECURRENT SUI AFTER PRIMARY SURGERY OR SUI COMBINED WITH ISD/DETRUSOR UNDERACTIVITY: FOCUSING ON THE RE-ADJUSTMENT PROCEDURE OF SLING TENSION

Hypothesis / aims of study

There are only a few researches regarding the re-adjustable sling procedure such as REMEEX[®] system for female patients with recurrent SUI after primary surgery or SUI with intrinsic sphincter deficiency (ISD)/detrusor underactivity. We assessed the early outcome of REMEEX[®] system in these patients, especially focusing on the re-adjustment procedure of sling tension.

Study design, materials and methods

We reviewed 50 women who received the anti-incontinence surgery using REMEEX[®] system by a single surgeon and were followed-up at least 3 months following surgery. With regard to the re-adjustment of sling tension, sling tension was reduced using the manipulator when maximum flow rate was ≤ 10 ml/sec or post void residual volume was ≥ 150 ml in immediate postoperative period. On the contrary, sling tension was increased if there were SUI symptoms in the same period. In cases of the development of recurrent SUI symptoms during follow-up, sling tension was increased by re-insertion of the manipulator through supra-pubic approach with 1 cm skin incision under local anesthesia. Treatment success was defined as absence of subjective complaint of leakage and objective leakage on the stress test (cure) or rare leakage but satisfactory to the treatment regardless of the stress test (improvement).

Results

Mean age of the patients was 63.4 years, and mean body mass index was 24.5 kg/m². Mean follow-up duration was 5.0 months. Of patients, 37 had pure SUI symptoms and 13 had stress predominant mixed urinary incontinence. Recurrent SUI after primary surgery was in 12 women, and ISD was in 33 women. According to the Stamey grade, 17 women were in grade I, 20 in II, and 13 in III. Mean maximum urethral closure pressure was 42.4 cmH₂O (13.0 - 101.0), and mean valsalva leak point pressure was 65.2 cmH₂O (38 - 120). Mean amount of 1-hour pad test was 71.9g (7 - 418). During follow-up, 8 (16%) women received re-adjustment of sling tension. Treatment success was 96% with cure rate of 64% (32 women) and improvement rate of 32% (16 women). There were no complications \geq grade 2 based on the Clavien system.

Interpretation of results

Sling tension was easily re-adjusted with simple procedure, and early outcomes were excellent in women with recurrent SUI after primary surgery or SUI with ISD/detrusor underactivity.

Concluding message

REMEEX[®] system for female SUI could apply the re-adjustment of sling tension with simple approach when recurrent SUI symptoms or voiding difficulty were developed during follow-up after surgery. Sling tension could be re-adjusted even after 7 months after surgery. Early results were excellent and procedures were safe.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Institutional Review Board of Seoul National University Bundang Hospital **Helsinki:** Yes **Informed Consent:** Yes