

## SINGLE INCISION SLING FOR THE TREATMENT OF FEMALE STRESS URINARY INCONTINENCE WITH INTRINSIC SPHINCTER DEFICIENCY

### Hypothesis / aims of study

The object of this study was to assess the treatment outcomes of Mini-Arc™ single incision sling for stress urinary incontinence (SUI) with intrinsic sphincter deficiency (ISD).

### Study design, materials and methods

A total 105 women who underwent Mini-Arc™ single incision sling procedures with minimum follow-up duration of 1 year were included in the study. The patients were divided into two groups: 37 patients with ISD (group I) and 68 patients with non-ISD (group II) based on preoperative urodynamic studies. Cure of SUI was defined if the patient had negative cough stress test. Cure rates of the two groups were compared at 12 months.

### Results

There were no significant differences in demographics between the groups: mean age, body mass index (BMI), parity, menopausal status, hysterectomy status (Table). All urodynamic parameters except forValsalva leak point pressure (VLPP) showed no significant differences (Table). The cure rates of group I and II were 78.4% and 85.3% respectively and there was no statistically significant difference (Chi-square test,  $p=0.421$ ). On regression analysis, no preoperative demographic and urodynamic factors influence cure rates in ISD group.

### Interpretation of results

To our knowledge, this is the first report about the treatment outcomes of single incision sling in ISD and Mini-Arc™ single incision sling system may be an effective procedure regardless of ISD.

### Concluding message

Our short-term clinical results suggest that Mini-Arc™ single incision sling provides a good cure rate in women SUI with ISD.

Table. Baseline characteristics of ISD and non-ISD groups

|                           | ISD       | Non-ISD   | p-value |
|---------------------------|-----------|-----------|---------|
| Age                       | 59.8±12.6 | 57.3±11.1 | 0.290   |
| BMI                       | 24.4±4.2  | 24.3±3.5  | 0.886   |
| Parity                    | 2.9±1.3   | 3.0±1.4   | 0.734   |
| Menopausal status (%)     | 73        | 75        | 0.819   |
| Previous hysterectomy (%) | 13.5      | 11.8      | 0.767   |
| Pad test(1-hour)          | 40.4±39.0 | 26.2±17.7 | 0.012   |
| VLPP                      | 51.2±14.7 | 84.0±21.5 | 0.000   |
| MUCP                      | 39.8±20.3 | 46.3±14.4 | 0.059   |

BMI: body mass index, VLPP: Valsalva leak point pressure, MUCP: maximal urethral closure pressure

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Hallym University Ethics Committee **Helsinki:** Yes **Informed Consent:** Yes