SINGLE INCISION SLING FOR THE TREATMENT OF FEMALE STRESS URINARY INCONTINENCE WITH INTRINSIC SPHINCTER DEFICIENCY – A 36 MONTH FOLLOW-UP STUDY

Hypothesis / aims of study
Mid-urethral sling procedures have become the prime surgical treatment for women with stress urinary incontinence (SUI). Single incision sling potentially offer similar efficacy with reduced morbidity although there are limited long-term efficacy data.

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 36 months were included in the study. The patients were divided into two groups: 38 patients with ISD (group I) and 67 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 36 months.

Results
There were no significant differences found in demographics between the groups: mean age, body mass index (BMI), parity, menopausal status, hysterectomy status. All urodynamic parameters except for Valsalva leak point pressure (VLPP) and maximal urethral closure pressure (MUCP) showed no significant differences (Table). The cure rates of group I and II were 69.7% and 78.5% respectively and there was no statistically significant difference (p=0.082). 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 mid-term clinical results suggest that Mini-Arc™ single incision sling provides a good cure rate in women SUI with ISD, even though displaying a trend toward a lower efficacy.

Disclosures
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