LONG TERM RESULTS OF MINI-SLING PROCEDURE FOR STRESS URINARY INCONTINENCE IN PATIENTS WITH MIXED URINARY INCONTINENCE

Hypothesis / aims of study

Treatment and diagnosis of mixed urinary incontinence (MUI) is controversy. Few studies have examined the efficacy of mid urethral sling (MUS) for stress urinary incontinence (SUI) on MUI by the disappearance of urgency and urgency urine incontinence (UUI). However, in many of these studies, patients had simultaneous prolapse repair, thereforethe disappearance of symptoms could have been related to the prolapse repair (1-3). Most MUSs that have been examined were the trans obturator or subrabubic MUS (TVT, TVT-O ect) and no study examined yet the efficacy of Mini-sling on MUI.

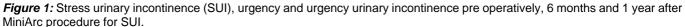
The aim was to assess the efficacy of the MiniArc (AMS, U.S.A) in women with MUI who underwent SUI surgery without prolapse repair.

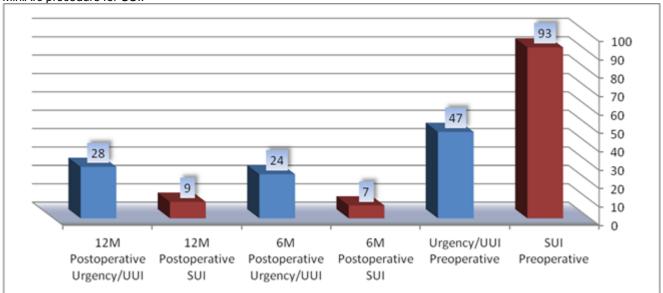
Study design, materials and methods

This is a retrospective study, included all women who underwent MUS surgery for SUI without prolapse repair, by the MiniArc kit, between January 2011 and March 2013. The procedure was performed in a day care set up, under local anesthesia if possible. Data was collected from computerizes base files and included: demographic features, pre-op structural questionnaire regarding symptoms of SUI, urgency, urgency incontinence and nocturia, examination for SUI and additional tests if performed. SUI was determined upon cough stress test with full bladder. MUI was determined upon classic symptoms of urgency and UUI. Urodynamic tests were done only if needed and not routinely. Data collected regarding the procedure included: anesthesia, hospital stay, intra and post-operative complications. Women were followed 6 weeks, 6 months, one year post-operatively and once a year since. Data collected included patient's symptoms regarding pain, dyspareunia, SUI, urgency, UUI and nocturia. Examination for SUI using a cough stress test and mesh related complications.

Results

93 women who underwent surgery for SUI with MiniArc, without prolapse repair were included in our study. Mean age was 53 years (range 33-75), Mean BMI was 28 (range 16.8-41.9), and mean parity was 3.3 (range 0-8). Mean follow-up was 21 months (range 12-38). 47 out of 93 patients (50%) were diagnosed with MUI. 78 (84%) were operated under local anesthesia. One patient (1%) was converted from local to generalize anesthesia due to pain. There were no intra-operative complications and 92% were released on the same day. The overall objective and subjective complete cure rate of SUI was 89% (83 patients). In the group of MUI, 44 out of 47 (94%) had complete cure of SUI and 23 out of 47 patients (49%) had complete dissolve of urgency and UUI after 6 months follow-up and 19 out of 47 (40%) after 12 months follow-up (Figure 1).





Interpretation of results

Our results demonstrate that MiniArc for SUI repair can be very beneficial even when done as office procedure and under local anesthesia. The procedure is also beneficial for MUI, including high SUI cure rate and the disappearance of urgency and UUI for 40% of patients in the long term.

Concluding message

We recommend that women suffering from MUI should be informed about the benefits of MUS not only for the SUI symptoms but also for the urgency and UUI. This should be accompanied by a thorough explanation of the likelihood of symptoms relief and the possible need for pharmacological therapy postoperatively.

References

- 1. Jain P, Jirschele K, Botros SM, Latthe PM. Effectiveness of midurethral slings in mixed urinary incontinence: a systematic review and meta-analysis. Int Urogynecol J. 2011 Aug;22(8):923-32.
- 2. Athanasiou S, Grigoriadis T, Giannoulis G, Protopapas A, Antsaklis A. Midurethral slings for women with urodynamic mixed incontinence: what to expect? Int Urogynecol J. 2013 Mar;24(3):393-9.
- 3. Lee JK, Dwyer PL, Rosamilia A, Lim YN, Polyakov A, Stav K. Persistence of urgency and urge urinary incontinence in women with mixed urinary symptoms after midurethral slings: a multivariate analysis. BJOG. 2011 Jun;118(7):798-805. doi: 10.1111/j.1471-0528.2011.02915.x. Epub 2011 Mar 10.

Disclosures

Funding: none Clinical Trial: No Subjects: NONE