

INITIAL EXPERIENCE WITH MINI-ARC PROCEDURE

Hypothesis / aims of study

Surgical techniques recreating support and stability between the urethra and the anterior vagina wall continue to evolve. Mini Arc is a new single-incision sling designed for the treatment of Stress Urinary Incontinence (SUI) in women. The aims are to evaluate the efficacy and morbidity of this new minimally invasive procedure with a follow up of twelve months.

Study design, materials and methods

This study was designed to collect, operative, perioperative, and follow-up data after a period of 6 and 12 months respectively on this new, minimally invasive procedure. Prospective, observational study of our 30 patients (Mean age was 53.4 years, with range 41-73), operated for SUI with the Mini Arc sling. Patients were operated between February 2008 and February 2009. The efficacy of the procedure was evaluated with a symptom Questionnaires (ICIQ-UI SF) and an objective assessment including physical examination, stress test and UD testing if needed.

Results

A total of 30 patients with subjective and objective evidence of genuine SUI were treated. Most of the procedures were under spinal anaesthesia (26/30 patients). The mean operation time was 9 minutes and the mean amount of blood loss <50ml. No other Intraoperative complications occurred. The average hospital stay was 2 days and post operative pain reported by only two women. Postoperative complications included: voiding difficulty in one which resolved on postoperative day one and UTI in 3 women. De novo urgency appeared in three patients which was cured with anticholinergic. Cure rate at one month was 98%; defined as no complaint of any leaking. At 6 months and 12 months the overall satisfaction was 94%. The ICI-SF questionnaire symptoms score showed a highly statistical decrease at the last follow up.

Interpretation of results

This prospective data obtained from our initial experience show that 94% of patients were satisfied with the results of Mini Arc procedure. There were no serious intra-operative complications and no pain was reported that was attributable to the implant. The learning curve for this procedure is very short compared to other transvaginal slings.

Concluding message

The Mini Arc shows promising results as a minimally invasive surgical approach to female SUI, with rapid operating times, minimal morbidity and high patient satisfaction.

<i>Specify source of funding or grant</i>	No conflict of interest
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	Yes
<i>Specify Name of Ethics Committee</i>	Greek National Health System rules
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes