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## TREATMENT OF FEMALE STRESS URINARY INCONTINENCE WITH NEWER MINI ARC<sup>TM</sup> SLING IN COMPARISON TO THE TRANSOBTURATOR MIDURETHRAL TAPE (TOT)

### Hypothesis / aims of study

The Mini Arc<sup>TM</sup> tape is a small length tape and was designed for the treatment of female stress urinary incontinence. The purpose of the present study is the evaluation of the safety and the efficiency of the new tape Mini Arc<sup>TM</sup> in comparison to the Transobturator midurethral tape (TOT).

### Study design, materials and methods

The study is a retrospective and includes 84 women with urodynamically documented stress urinary incontinence who were treated with midurethral sling.

This study was designed to collect operative, perioperative, and follow-up data after 1, 6 and 12 months on this new (Mini Arc<sup>TM</sup>), minimally invasive procedure and compare it respectively with the TOT Procedure. 84 women (mean age 58 ± 1.6 years) with genuine SUI were operated on between February 2008 and June 2009. We used the TOT midurethral sling technique on 46 patients (group A), while for the same period we performed the the new single-incision sling Mini Arc<sup>TM</sup> procedure on 38 patients (group B). The efficacy of the procedures was evaluated.

### Results

A total of 84 patients with objective evidence of genuine SUI were treated. Most of the procedures were under spinal anaesthesia (80/84 patients). The mean operation time was 17 and 8 minutes respectively in the TOT and Mini Arc<sup>TM</sup> group. No intraoperative complications occurred. Postoperative pain that would lead to prescription of painkillers was reported by 12% of the Group A vs. 4.3% of the group B. The average hospital stay was 2 days for both groups. All patients had a catheter placed for 24 hours. Urinary retention took place only in 3 patients of the group A as opposed to 2 in the group B. Urinary tract infections were recorded in 4 and 2 of the TOT and Mini Arc<sup>TM</sup> patients, respectively, while vaginal erosion took place in 2 patients in the group A. De novo urgency appeared in 8 patients in the group A and in 3 patients in the group B which was treated with anticholinergics. In the group A, continence rates were 95% after one month, 94% at six months and 94% after 1 year, while in the group B, the continence rate was 97% after one month, 95% at six months and 94% after 1 year

### Concluding message

The new single-incision sling Mini Arc<sup>TM</sup> results data obtained from our initial experience show a 94% continence rate that is comparative to the TOT procedure. The Mini Arc<sup>TM</sup>, a novel mid-urethral sling, seems to be a safe anti-incontinence procedure. The learning curve for this procedure is very short compared to TOT slings.

Further research and longer follow-up is needed to establish durability of these results as well as objective improvement in quality of life parameters.

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<b>Is this a clinical trial?</b>	<b>No</b>
<b>What were the subjects in the study?</b>	<b>HUMAN</b>
<b>Was this study approved by an ethics committee?</b>	<b>Yes</b>
<b>Specify Name of Ethics Committee</b>	<b>Helsinki</b>
<b>Was the Declaration of Helsinki followed?</b>	<b>Yes</b>
<b>Was informed consent obtained from the patients?</b>	<b>Yes</b>