

## COMPARISON BETWEEN TWO SINGLE INCISION MINIMALLY INVASIVE PROCEDURES, MINIARC AND NEEDLELESS, FOR THE TREATMENT OF PRIMARY STRESS URINARY INCONTINENCE

### Synopsis of Video

The video shows a simultaneous comparison between two new single incision minimally invasive procedures, MiniArc and Needleless, for the treatment of women suffering from primary stress urinary incontinence. Differences in the shape, length of the tape and devices used for the insertion of the sling are discussed.

### Hypothesis / aims of study

To evaluate the feasibility and further on the efficacy of two different single incision minimally invasive procedures for the treatment of stress urinary incontinence.

### Study design, materials and methods

The single incision new minimally invasive procedures for stress urinary incontinence, MiniArc and Needleless, provide support to the urethra by means of a short polypropylene tape of 8.5 and 11 cm length respectively. The tapes are inserted, with different devices, through the obturator internus muscle on both sides of the female pelvis.

The tapes look different with the MiniArc one ending with a non absorbable polypropylene tip while the Needleless tape is designed with two small pockets at its edges to allow the passage of a Kelly clamp

With the patient in lithotomic position a 2 cm vaginal incision is performed just 1 cm below the external urethral meatus and dissection of para-urethral spaces is carried on. The dissection ends at the level of the descending pubis ramus without penetrating the fascia covering the obturator internus muscle.

The MiniArc tape is positioned under the urethra using a special designed needle on which the tip of the polypropylene sling is inserted while with the Needleless procedure a simple Kelly clamp is used for penetrating the muscle.

Once the tape is inserted on both sides of the pelvis the tension of the sling is adjusted and the vaginal epithelium is then closed

### Results

Data on the efficacy of these two new minimally invasive procedures for the cure of SUI are still preliminary on small number of patients with short follow-up. Nevertheless experimental data on animals showed that the insertion of a short arm sling through the endopelvic fascia provided similar pull-out forces at the insertion and later on as conventional retropubic suburethral slings, suggesting that both could be equally effective for urethral support.

### Interpretation of results

MiniArc and Needleless are two minimally invasive techniques that can be performed as day surgery procedures. No post-operative pain or urinary difficulty have been reported by patients undergoing both procedures. Prospective studies on large number of patients are required to evaluate the long term efficacy.

### Concluding message

Both procedures seem easy to perform and provide good support to the midurethra.

<b><i>Specify source of funding or grant</i></b>	<b>No grant or funding</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>No</b>
<b><i>This study did not require ethics committee approval because</i></b>	<b>Procedures were normally performed in all departments</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>Yes</b>