

## **SAFYRE: A NEW CONCEPT FOR ADJUSTABLE MINIMALLY INVASIVE SLING FOR FEMALE URINARY STRESS INCONTINENCE**

### **Synopsis of Video**

Safyre Sling is a new technique to create a support to mid-urethra, in order to restore the continence in women with stress urinary incontinence (SIU). Safyre consists of a polypropylene mesh that acts as a urethral support, held between two self-anchoring columns which are made of an implant grade polydimethylsiloxane polymeRodriguesThese columns are the basis of the autofixing system, for minimum surgical damage of pelvic floor natural support structures. A specially designed insertion needle permits both suprapubic or transvaginal approach, according to the surgeon best skills, by changing the needle holder between it's extremities.

Two 0.5 cm transverse incisions are made close to the superior aspect of the pubic bone 5 cm apart. A longitudinal vaginal incision, 1.5 cm in length is made, starting 0.5 cm from the urethral meatus. Notice that this incision is not allowed to encroach on the bladder neck. Dissection is done to create a 1 cm tunnel lateral to the urethra for the introduction of the Safyre insertion needle. First, the needle is advanced through the vaginal tunnel until the perforation of pelvic floor at the level of the mid-urethra. Then, it is redirected against the back of pubic bone and advanced continuously to the benchmarks in the suprapubic area. Cystoscopy is performed to rule out bladder perforation. After the removal of the holder, Safyre Sling is attached to the needle and pulled out to the suprapubic area. The same maneuvers are repeated on the other side. The proper tension of the sling is adjusted maintaining a Metzenbaum pair of scissors between the urethra and the sling, to prevent undue tension. The extremities of the sling are cut and the Metzembraum scissors are removed. No further fixation is needed and the incisions are closed in the usual manneRodriguesAn indwelling catheter is left in place overnight.

The initial results obtained in 33 patients have showed a cure rate of 97 %. One patient underwent a vaginal mobilization of the sling due to urinary retention. One patient had vaginal exposition of the sling that was removed. Suprapubic pain was notice in 3 patients.

This sling allows for postoperative adjustment under local anesthesia should it became necessary. It can become an alternative for restoring the urethral support, if the good short-term results prove to be long lasting.