

**353**

Palma P<sup>1</sup>, Riccetto C<sup>1</sup>, Thiel M<sup>1</sup>, Dambros M<sup>1</sup>, Leitão V<sup>1</sup>, Herrmann V<sup>1</sup>, Dametto Neto P<sup>1</sup>, Netto Jr. N<sup>1</sup>

1. University of Campinas - UNICAMP

## **TRANSURETRAL INJECTION FOR FEMALE URINARY STRESS INCONTINENCE: REFINEMENT OF TECHNIQUE**

### **Synopsis of Video**

Periurethral injections is used mainly for the treatment of type III urinary incontinence in women. Teflon, cross-linked bovine collagen and silicon have been the most used materials. However, the use of teflon is controversial because of the evidences of particle migration and the risk of carcinogenic effect. The absorption of collagen brings the problem of repeated procedures. Moreover, the silicon preparation commercially available demands on a specially designed injection tool. To solve these problems, a new material was developed, composed of carbon coated zirconium beads (Durasphere), allowing an easy and accurate injection in the urethral submucosa. This video highlights the technical details of this procedure.

The bulking procedure is performed with the patient under regional anesthesia and in the lithotomy position. The injections are performed transurethrally under direct vision using a 24 Fr cystoscope with a 12-degree telescope and an endoscopic needle provided by the manufacturer. The bulking agent was injected submucosally between the bladder neck and the midurethra. Initial needle punctures were performed approximately one and one-half centimeters distal to the bladder neck. The number of injection sites depended upon the degree of closure achieved during the procedure, but typical locations included the 3, 6 and 9 o'clock positions. Usually, a mean of 6 cc (range 2 to 7) is injected per treatment.

The combination of a safe procedure, quickly performed, producing durable results in a minimally invasive manner is to become increasingly attractive to both patients and surgeons. Long term follow-up show 60% of successes after five years follow-up. Proper injection under endoscopic control along with the physical properties, may be the the reason of the superior results when compared to blindly performed injections.