

## EVALUATION OF PELVIC FLOOR RECONSTRUCTIVE SURGERY USING TRIDIMENSIONAL HELICAL CT

### Hypothesis / aims of study

To evaluate and further understanding the use of meshes in the anterior, medium and posterior compartments after pelvic floor reconstruction, using a special polypropylene mesh which received barium as a contrast material.

### Study design, materials and methods

A total of fifteen female patients with stress urinary incontinence (SUI), anterior (AVP) and posterior (PVP) vaginal wall prolapses or a combination of those underwent surgical repair using radiopaque meshes, after informed consent. Patients with SUI underwent obturator procedure and those with severe type III SUI underwent obturator crossover slings. Patients with AVP underwent a combined pre- pubic and obturator mesh and those with PVP underwent an infracoccygeal sacropexy. Tridimensional reconstruction using helical CT was done four weeks post operatively along with cystography or enema depending upon the previous surgery.

### Results

In all cases the device was well demonstrated. Transobturator slings were shown at the midurethra and the anchoring tails perforated the obturator foramen at the safety region.

Obturator crossover assumed a helical shape around the urethra in a loose manner. Regarding AVP both pre-pubic armpit and obturator ones were clearly seen and the mesh in the proper position supporting the bladder base occluding the distal part of the urogenital hiatus (fig1).



Infracoccygeal sacropexy along with the enema disclosed indirectly a well supported "neo rectovaginal fascia" and the anchoring tails parallel to the sacrum.

### Interpretation of results

In all cases the mesh was well demonstrated and seems adequate to study the treatment of stress urinary incontinence, anterior and posterior vaginal wall prolapses.

### Concluding message

Tridimensional reconstruction helical CT using radiopaque meshes allows for better understanding live anatomy, the way neoligaments are created and seems to be a promising investigative method in pelvic reconstructive surgery.

**FUNDING:** none

**HUMAN SUBJECTS:** This study was approved by the Conselho Nacional de Ética em Pesquisa - CONEP and followed the Declaration of Helsinki informed consent was obtained from the patients.