

TWO-DIMENSIONAL PERINEAL ULTRASONOGRAPHY IN THE SELECTION OF PATIENTS UNDERGOING MALE SLING AFTER RADICAL PROSTATECTOMY

Hypothesis / aims of study

Perineal ultrasound is a well-accepted method for women with stress urinary incontinence. We evaluated feasibility of this method for men with urinary incontinence post radical prostatectomy. This study assesses the differences in a dynamic evaluation of the urethra and pelvic floor contraction before and after SLING procedure for urinary incontinence using perineal ultrasonography.

Study design, materials and methods

This clinical study involved one male patient, 61 years old who underwent radical prostatectomy (RP) two years ago. This patient underwent perineal ultrasound, pre-operative urethroscopy and then a SLING procedure. After the procedure, he performed again the perineal ultrasound. Surgery was done by implantation of transobturator sling DynaMesh® -PRM.

Perineal ultrasound was performed with a 3.5-5 MHz ultrasound probe, a two-dimensional (2D) imaging, which was placed at the perineum between scrotum and anus. The patient underwent ultrasound examination following standardized criteria under the three conditions of rest, contraction and Valsalva maneuver. For all conditions it was recorded the bulbar urethral mobility and pelvic floor muscle contraction.

Results

When perineal ultrasound was performed before surgery, was observed good mobility of pelvic floor during contraction with cranioventral displacement of pelvic structures. During Valsalva maneuver was perceived caudal displacement of bulbar urethra and pelvic structures. Pre-operative urethroscopy showed no intrinsic or extrinsic narrowing point.

After the SLING procedure, using perineal ultrasound was visualized the mobility of the proximal and bulbar urethra and voluntary pelvic floor contraction.

Interpretation of results

The most important difference was observed in the degree of bulbar urethra mobility during Valsava maneuver. The SLING tape restricts the bulbar urethra mobility during this maneuver. Post-operative urethroscopy showed extrinsic coaptation at the bulbar urethra level.

Concluding message

Two-dimensional perineal ultrasonography provides more insight into the diagnosis of men with post prostatectomy incontinence. It is a non-invasive and reproducible diagnostic procedure, which can be recommended for the evaluation of post prostatectomy incontinence. The most important difference was the reduction of bulbar urethral mobility by the SLING tape during Valsava maneuver.

Disclosures

Funding: BRM medical provided the sling tape and sources to produce de video. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** University of Campinas Ethics Committe **Helsinki:** Yes **Informed Consent:** Yes