

## CYSTOURETHROGRAM FOR THE INDICATION OF CYSTOCELE'S SURGICAL CORRECTION AFTER TRANSOBTURATOR TAPE DUE TO URINARY INCONTINENCE

### Hypothesis / aims of study

To assess the utility of voiding cystourethrogram (VCUG) after surgical correction of stress urinary incontinence (SUI) with transobturator tape (TOT) due to symptomatic cystocele in order to indicate cystocele's surgical correction. To investigate the results of hidden cystocele's surgical correction.

### Study design, materials and methods

659 women underwent urinary incontinence's surgery by TOT tape between mar-2003/jan2013. Patients did not present irritative symptoms, nor the feeling of perineal pressure or incomplete emptying before surgery.

215 women did refer intermittent or two-time voiding in outpatient controls performed 3 12 and more months after TOT (once yearly). VCUG and bladder residue measure were performed. VCUG was considered positive when bladder was infrapubic. Bladder residue was positive when >200cc. Cystocele's surgical correction was performed in an 83% of patients (132/159) with positive VCUG and positive or negative bladder residue. ICIQ-SF questionnaire was fulfilled by the patients at the moment of the diagnosis and in the controls after 3 and 12 months and once yearly afterwards.

Age, SUI's evolution time and results of the cystocele's surgical correction in patients with previous TOT due to SUI were investigated. Clinical evolution of patients with intermittent or two-time voiding without evident cystocele in VCUG was also studied.

We set three study groups:

Group A (n=56): Women with intermittent voiding, negative VCUG and negative bladder residue;

Group B (n=135): Women with intermittent voiding, positive VCUG and negative bladder residue;

Group C (n=24): Women with intermittent voiding, positive VCUG and positive bladder residue.

Descriptive statistics, ANOVA, Student's t-test, Fischer's exact test;  $p < 0.05$  was considered significant.

### Results

Homogeneous age ( $p=0.3109$ ), median 56.45y (48-80). All patients presented SUI grade II-III. SUI's evolution time was greater in patients with positive VCUG comparing to those with negative VCUG ( $p=0.00023$ ). No woman with a maximum flow (Qmax) >14 ml/s at free uroflowmetry was re-operated. No differences were found between Group B and C regarding the success after cystocele's surgical correction ( $p < 0.9271$ ). Improvement in voiding habits was achieved in patients who underwent surgery in Group B ( $p=0.00093$ ) and in Group C ( $p=0.0012$ ) comparing to those who were not operated within both groups. Median follow-up time before indicating the re-operation to correct the cystocele was 32 months (range 10-56).

### Interpretation of results

The classification and interpretation of cystocele in a unique patient is not always easy because we do not know the bladder repletion level during the physical examination, and because sometimes we have got little time to perform it. This problem also appears when performing the VCUG and measuring bladder residue, and their precision can be altered by bladder's position during Valsalva's.

A TOT is normally indicated in women who do not refer irritative symptoms, incomplete emptying or perineal pressure, and no cystocele is evident during physical examination. On one hand, it is controversial to perform a VCUG before TOT systematically; on the other hand, a second surgery could have been avoided if a VCUG had been made before TOT.

### Concluding message

The indication to perform a VCUG before TOT is not clear even in cases with solitary SUI. When emptying problems appear after TOT due to hidden pre-operative cystocele, its surgical correction improves the voiding habit.

We suggest that if there is any doubt regarding emptying problems, or in patients having long-evolution SUI or grade III SUI, a VCUG can be necessary before TOT to investigate bladder's position.

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Ethics Committee of the University Hospital of Salamanca **Helsinki:** Yes **Informed Consent:** Yes