

## URINARY SYMPTOMS AND URODYNAMIC FINDINGS IN WOMEN WITH PARAMETRIAL ENDOMETRIOSIS: AN EXPLORATORY STUDY

### Hypothesis / aims of study

Sometimes, deep infiltrating endometriosis (DIE) needs ample surgical resections, which can be followed by urinary problems. Considering the complex distribution of pelvic nerves and their symmetric relationship with the parametrium, we pre-operatively assessed the association between DIE in parametrium not only with specific urinary symptoms but also with urodynamic findings.

### Study design, materials and methods

Cross-sectional (pre-planned) observational study (Canadian Task Force Classification II-2) including a total of 50 women (ages 15-52 years) who were evaluated before undergoing laparoscopy for DIE during pre-operative diagnostic routine from June/2011 to August/2013 in Rio de Janeiro, Brazil.

Assessed urinary symptoms: urgency, perception of bladder fullness, incontinence, diurnal micturition, nocturia, dysuria/strangury, interrupted urine flow Valsalva maneuver and *feeling of incomplete urination*. Urodynamic variables: maximum flow, post-voiding residue, sensitivity, complacency, maximum cystometric capacity (MCC), opening pressure, maximum pressure in urination, detrusor contractility (Schäffer's nomogram) and obstruction (Abrams-Griffiths's nomogram).

### Results

Pre-operative diagnostic of DIE in parametrium (>5mm) was made by an experienced radiologist with basis on nuclear magnetic resonance imaging. The prevalence (95% confidence interval) of lesion in parametrium was 24.0% (95%CI:12.0-36.0%), including six severe cases in which DIE also infiltrated ureter and uterine artery. There was no woman with bilateral infiltrated parametrium. The prevalence of urinary symptoms was 32.0% (95%CI:20.0-46.0%) and they were significantly associated with DIE-lesion in parametrium (OR=4.2; 95%CI:1.1-16.2; p=.04). Concerning the association between specific symptoms and DIE in parametrium, the only significant symptom was interrupting voiding (OR=27.9; 95%CI:2.8-275.8; p<.01), though some tendencies (p>.05) were noticed. Associations were assessed through non-parametric Fisher's Exact test (2-sided).

### Interpretation of results

DIE in parametrium was a high prevalence and was associated with obstructive symptoms.

### Concluding message

Considering this sample of women in whom several sites were affected by DIE, the probability of pre-operative urinary symptoms or urodynamic findings being linked to DIE in parametrium couldn't be excluded. More, bilateral DIE in parametrium seems to be uncommon; it couldn't be evaluated because there were no cases.

### Disclosures

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