

Resende Júnior J A D¹, Buere R T², Guerra C S³, Sessa F V⁴, Aragão L C⁴, Soares Raymundo T⁴, Oliveira M A P², Crispi C⁴, Fonseca M F³

1. Rio de Janeiro State University AND Hospital Federal da Lagoa, 2. Rio de Janeiro State University, 3. Fernandes Figueira Institute-FIOCRUZ, 4. UNIFESO

PREVALENCE OF PRE-OPERATIVE URODYNAMIC ABNORMALITIES IN WOMEN WITH DEEP INFILTRATING ENDOMETRIOSIS: A DESCRIPTIVE STUDY

Hypothesis / aims of study

Post-operative transient urinary problems usually occur after large bowel resections. Sometimes, when problems last longer than few days, the contribution of some pre-operative conditions may be suspected. We aim to describe (pre-operatively) the prevalence of the main urinary symptoms and urodynamic findings in women with deep infiltrating endometriosis (DIE).

Study design, materials and methods

Cross-sectional (pre-planned) observational study (Canadian Task Force Classification II-2) including a total of 70 women aging 15-56y who were, during diagnostic routine, evaluated before undergoing laparoscopic cytoreductive surgery (June/2011-August/2013). The diagnosis of DIE (infiltration>5mm) was considered with basis on clinical features and nuclear-magnetic-resonance-imaging (interpreted by an experienced radiologist).

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

Posterior-compartment had some DIE-lesion in 96% of women (70% showed lesions in sigmoid-colon); anterior-compartment was affected in 41% of patients. Prevalence of symptoms (descending order): at least one symptom (34.8%), necessity of high abdominal pressure for micturition (27.5%), incontinence (21.7%), urgency (20.3%), *feeling of incomplete urination* (14.5%), interrupting voiding (10.1%), recurrent urinary infection (10.1%), dysuria (7.2%) and hematuria (1.4%). Prevalence of urodynamic findings (descending order): maximum flow $\leq 15\text{mL/sec}$ (56.5%), open pressure $\geq 30\text{cmH}_2\text{O}$ (50.0%), obstruction/Abrams-Griffiths's nomogram (23.5%), complacency $\leq 20\text{mL/cmH}_2\text{O}$ (20.3%), decrease sensibility (18.7%), high *post-micturition volume* $\geq 15\%$ of MCC (17.4%), low detrusor pressure in maximum urination (10.3%), detrusor hyperactivity (8.8%), high sensibility (7.2%), detrusor contractility/Schäffer's nomogram (5.8%) and low MCC $\leq 350\text{mL}$ (4.3%).

Interpretation of results

Our results show a high prevalence of endometriosis in the posterior compartment. The main clinical findings and urodynamic study were obstructive changes, but we observed less frequently irritative symptoms.

Concluding message

Considering women in whom several sites were affected by DIE, data suggested that urinary symptoms or urodynamic findings might exist before surgery in more than 1/3 of the patients. Mild obstructive findings detected by urodynamic testing seem to be less perceived by patients and, probably, sub estimated in most cases.

Disclosures

Funding: SOURCE OF FINANCIAL FUNDING: Brazilian Federal Government (PIBIC/PIBITI/PIP Programs of Fiocruz and National Council for Scientific and Technological Development - CNPq). **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** INSTITUTIONAL REVIEW BOARD APPROVAL: CAAE 15381613.0.0000.5269. Research Ethics Committee of the National Institute of Women, Children and Adolescents Health Fernandes Figueira (IFF), Brazil's Ministry of Health. **Helsinki:** Yes **Informed Consent:** Yes