

## MANAGEMENT OF ITALIAN WOMEN PRESENTING WITH LUTS IN UROLOGY CENTRES: THE FLOW STUDY.

### Hypothesis / aims of study

LUTS in women are identical to those in men, although the underlying causes differ. To diagnose them, the physician should conduct a careful and comprehensive evaluation. Treatment depends on the underlying cause, and consists of three basic approaches: treat the underlying cause, provide empirical therapy aimed at specific symptoms or circumvent the problem.

The FLOW study (Female LUTS: Observational study in Women) is a 2-year non-interventional investigation aimed at evaluating (i) LUTS prevalence and (ii) the diagnostic and therapeutic management of Italian women presenting with LUTS at Urology Outpatients Clinics, which is the matter of this paper.

### Study design, materials and methods

Women aged  $\geq 18$  year with LUTS since at least 3 months and negative dipstick were enrolled in 39 Urology Centres widely distributed throughout Italy. Here we report on 934 consecutive patients enrolled during baseline visit. They underwent an urological visit according to the routine procedures used at each centre, in which the following was reported: demographic data, symptoms, clinical assessments, diagnosis and the freely assigned treatment.

### Results

The large majority of patients (90%) was new to the Centres: a high percentage (30%) was self-referred, whereas other urologist and gynaecologist were the referral in 23% of cases each. Less than one out of 5 new patients was referred by general practitioner. Forty-one percent of new patients had a previous diagnosis of LUTS.

A complete objective examination was performed in 16% of patients, including the assessment of perineal sensation, perineal reflexes, and anal sphincter tone and control. However abdominal physical examination and oestrogen status evaluation were each performed in more than 80% of patients.

Urinalysis and urine culture were highly performed (98 and 93% respectively); ultrasonography was the most commonly performed instrumental test (81%). A urodynamic test was performed in 49% of patients and uroflowmetry in 47%. The pad weight test was used in 7% of cases only. Interestingly, bladder or urinary diary was used in 35% of patients.

Overall, urinary incontinence of any type was diagnosed in 69% of women, OAB (overactive bladder with or without incontinence) in 53%, chronic pelvic pain in 15% and urinary retention in 9%.

A single diagnosis was given to 52% of patients; among them 36% had diagnosis of urinary incontinence alone distributed as: 53% stress, 24% mixed and 22% urge incontinence. Thirty-two percent of patients with stress urinary incontinence diagnosis were prescribed behavioural and rehabilitative therapy. Drugs, as a monotherapy or associated to other treatments, were more frequently given to patients with urge incontinence than stress or mixed one. Finally, patients with mixed urinary incontinence either did not receive any therapy (36% of cases) or a combination of them (29%).

OAB-wet was diagnosed to 74 patients and OAB-dry to 126. Three out of four patients who were diagnosed OAB-wet complained symptoms of urgency, daytime frequency and/or night time frequency and urge/mixed incontinence; on the other hand almost half of women with OAB-dry reported urgency other than daytime frequency and night time frequency and no urge incontinence.

Pharmacological treatment alone was prescribed to 44% of patients with OAB-wet and to 27% of patients with OAB-dry. Again, a high proportion (>27%) of OAB patients did not receive any recommended therapy.

### **Interpretation of results**

The present study is currently investigating the universe of female LUTS as they are managed in urology settings. There is a relevant percentage of female patients who self-refer to the urologist without previous clinical assessment. In particular, there is a low percentage of new patients who were referred by general practitioner.

According to [1], a careful and comprehensive evaluation should be performed by the physicians to diagnose the underlying cause of symptoms. In the FLOW study less than 1 out of 5 patients underwent a complete physical examination, even though a general urological and gynaecological visit was performed in more than 3 out of 4 patients.

As for instrumental assessment, it is interesting to note the high frequency of ultrasonographies performed in the past or prescribed during baseline visit, as opposite to the scarce use of voiding diary, which should represent an objective way to assess symptoms' severity.

The most frequent diagnosis is urinary incontinence, mostly in the stress or mixed form; whereas the ratio between diagnosis of OAB-dry and OAB-wet is about 2:1. A good correlation was found between symptoms, as reported by patients, and given diagnosis of OAB-wet.

### **Concluding message**

This study represents the Italian Urologist's routine management of women presenting with LUTS.

The patient management outcomes, the diseases evolution and the appropriateness of treatments of these patients will be evaluated at the upcoming 1- and 2-year follow-up visits .

### **References**

<sup>†</sup> Female lower urinary tract symptoms: pharmacotherapeutic consequences. BJU International 2000, 86, Suppl. 2, 1-10

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