

## The burden of Urological and Sexual dysfunction in Multiple Sclerosis : Study of a large Greek cohort

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### Introduction

Genitourinary dysfunction is frequent in Multiple Sclerosis (MS) patients<sup>1,2</sup>, but is often not acknowledged or addressed by treating physicians. We sought to assess the prevalence of genitourinary dysfunction in Greek MS patients.

### Methods

We included 153 MS patients (104 women and 49 men, mean age 45.8years) assessed in our MS outpatient clinic between September 2016 and May 2017. All patients gave informed consent and completed questionnaires on urinary and sexual symptoms, related symptomatic treatments and impact of these problems on quality of life (QOL).

### Results

Urinary symptoms (**Table 1.**) were reported by 85 of 153 patients, 59 of 104 women (57%) and 26 of 49 men (53%). The most prevalent symptoms were nocturia (N=50, 32.7%), urgency of urination (N=45, 29.4%), frequent urination (N=41, 26.8%), urine leaks (N=37, 24.2%), incomplete emptying of the urinary bladder (N=34, 22.2%). Urinary incontinence, repeated urinary tract infections and intermittent self-catheterization were reported in less than 10%.

Sexual symptoms (**Table 2.**) were reported by 69 patients (45.1%), 48 women (46.2%) and 21 men (42.9%).The most prevalent symptoms were low sex drive (N=56, 36.6%), sexual performance anxiety (N=14, 9.2%), reduced sensation perigenitally (N=12, 7.8%) and orgasmic dysfunction (N=9, 5.9%).

Thirty of 85 patients (35.2%) with urinary dysfunction and 31 of 69 (44.9%) with sexual dysfunction felt that these problems had a moderate to severe impact on their QOL. However, only 20% of patients with urological problems and 5.8% with sexual problems were receiving treatment.

**Table 1.**

Urological Symptom	Men (%) (total N= 49)	Women (%) (total N =104)	Gender difference p-value (Pearson chi <sup>2</sup> )
Frequent urination	24.5	27.9	0.658
Nocturia	32.7	32.7	0.996
Urgency of urination	26.5	30.8	0.591
Urine leaks	14.3	28.9	<b>0.050 *</b>
Incomplete bladder emptying	30.6	18.3	0.087
Urinary incontinence	4.1	7.7	0.399
Repeated urinary tract infections	0.0	5.8	0.086
Intermittent self-catheterization	4.1	1.9	0.435

**Table 2.**

Sexual Symptom	Men (%) (total N = 49)	Women (%) (total N = 104)	Gender difference p-value (Pearson chi <sup>2</sup> )
Low sex drive	28.6	40.4	0.157
Sexual performance anxiety	18.4	4.8	<b>0.007 *</b>
Reduced sensation perigenitally	10.2	6.7	0.456
Vaginal dryness	N/A	10.6	
Dyspareunia	N/A	3.9	
Orgasmic dysfunction	4.1	6.7	0.516
Erectile dysfunction	32.7	N/A	
Ejaculatory problems	8.2	N/A	

*N/A = Not Applicable*

### Discussion

The most significant gender difference was a significantly higher sexual performance anxiety in men than women. Despite the high prevalence of genitourinary dysfunction and an overall significant effect on QOL, only a small percentage of patients received symptomatic treatments.

### Literature

- 1.DasGupta R, Fowler C.J. Bladder, bowel and sexual dysfunction in multiple sclerosis: management strategies. *Drugs*. 2003;63(2):153-66. Review.
- 2.Nortvedt MW, Riise T, Myhr KM, Landtblom AM, Bakke A, Nyland HI. Reduced quality of life among multiple sclerosis patients with sexual disturbance and bladder dysfunction. *Mult Scler*. 2001 Aug;7(4):231-5.