

## LOWER URINARY TRACT SYMPTOMS AND SEXUAL DYSFUNCTION IN PEOPLE WITH



## **MULTIPLE SCLEROSIS**

# Tudor KI<sup>1</sup>, Bošnjak Pašić M<sup>2,3</sup>, Pašić H<sup>4</sup>, Mustač F<sup>4</sup>

1 Clinical Department of Neurology, Unit for headaches, neurogenic pain and spinal disorders, University Hospital Center Zagreb, Zagreb, Croatia

2 Referral Center for Demyelinating Diseases of the Central Nervous System, Clinical Department of Neurology, University Hospital Center Zagreb, Zagreb, Croatia

3 Josip Jurai Strossmayer University of Osijek, School of Medicine, Osijek, Croatia

4 School of Medicine, University of Zagreb, Zagreb, Croatia

# Hypothesis / aims of study

People with multiple sclerosis (PwMS) commonly report overactive bladder (OAB) symptoms, as well as the inability to void to completion. They may experience sexual difficulties (SD) due to multiple factors (1). The aim of this study was to evaluate sexual dysfunction (SD), lower urinary tract symptoms (LUTS) and their impact on quality of life (QoL) in PwMS.

# Study design, materials and methods

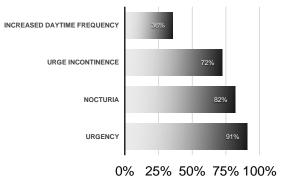
Study carried out in tertiary care centre over 10 months included 101 consecutive PwMS. LUTS and related QoL were evaluated using International Consultation on Incontinence Questionnaires (ICIQ): ICIQ-OAB, ICIQ-UI (urinary incontinence) and ICIQLUTS-QoL. SD was assessed with Multiple Sclerosis Intimacy and Sexuality Questionnaire (MSISQ). Data were analysed, and interpreted using descriptive statistics (IBM SPSS Statistics for Windows, version 23.0 (IBM Corp., Armonk, N.Y., USA)).

#### Results

Included PwMS (75 female, mean age 42.09 (range 19-77 years)) had mean Expanded Disability Status Scale (EDSS) score 3.1 (range 0.0-7.0). On ICIQ-OAB 35.6% (N=36) report increased daytime frequency, and 23.8% (N=24) borderline symptoms (7-8 times a day). 82% (N=82) report nocturia, 90.9% (N=90) urgency, with urge UI present in 72.4% (N=71). On ICIQ-LUTSQoL 91% (N=91) report feeling drowsy and sleepy during the day due to LUTS. 87% (N=87) had to plan to use a public washroom. In 56.7% (N=55) LUTS caused an issue with their partner of spouse. On MSISQ 26.2% (N=16) female PwMS report inadequate lubrication, 41.7% (N=10) male PwMS difficulty with erection. 28.3% (N=23) PwMS report lack of sexual interest or desire, 19.8% (N=17) less feeling or numbness in their genitals, 32.9% (N=27) report it takes too long to orgasm or climax. In 32.6% (N=32) bladder problems, 16.3% (N=14) pain, burning or discomfort, 20.9% (N=18) tremors or shaking, and in 28.1% (N=25) muscle tightness or spasms in their arms, legs or body interfered with their sexual activity. 20.2% (N=17) report feeling less masculine or feminine due to MS.

# Interpretation of results

Majority of PwMS (90.9%) report urgency, with urge incontinence present in 72.4%. 82% of PwMS report nocturia, 91 % report feeling drowsy and sleepy during the day due to LUTS, with 32.6% reporting that bladder problems interfered with their sexual activity. LUTS must be considered as contributing factor to SD, as well as possible contributing factor to fatigue which is known to be the one of the most common and most disabling symptoms of multiple sclerosis (2).



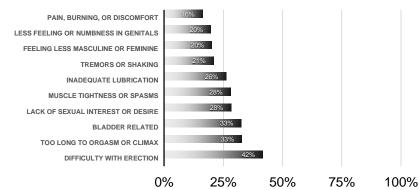


Figure 1. Lower urinary tract symptoms in people with multiple sclerosis

Figure 2. Patterns of sexual dysfunction in people with multiple sclerosis

# **Concluding message**

Neurogenic SD and overactive bladder (OAB) syndrome are present in PwMS with a significant negative effect on QoL. This must be considered when managing a PwMS.

<sup>1.</sup> Fragalà E, Privitera S, Giardina R, Di Rosa A, Russo G, Favilla V et al. Determinants of Sexual Impairment in Multiple Sclerosis in Male and Female Patients with Lower Urinary Tract Dysfunction: Results from an Italian Cross-Section Journal of Sexual Medicine. 2014;11(10):2406-2413.
2. Langes Nov-Christensen M, Bisson E, Finlayson M, Dalgas U. Potential pathophysiological pathways that can explain the positive effects of exercise on fatigue in multiple sclerosis: A scoping review. Journal of the Neurological Scie 2017;373:307-320. so G, Favilla V et al. Determinants of Sexual Impairment in Multiple Sclerosis in Male and Female Patients with Lower Urinary Tract Dysfunction: Results from an Italian Cross-Sectional Study. The