

Konstantinidis C¹, Skriapas K², Gekas A³, Kartsaklis P³, Andreadakis S³, Karyotis I⁴, Tzortzis V², Poulakis V⁵, Delakas D⁴, Melekos M²

1. National Institute of Rehabilitation, Athens, Greece, 2. Urology Department, University of Thessaly, Larissa, Greece, 3. Urology Department, General Hospital "Agios Andreas", Patra, Greece, 4. Urology Department, General Hospital "Asclepio", Voula, Athens, Greece, 5. Urology Department, Medical Center of Athens, Pal. Faliro, Athens, Greece

URODYNAMIC OBSERVATIONS IN PATIENTS WITH MULTIPLE SCLEROSIS AND LUTS

Hypothesis / aims of study

Multiple Sclerosis (MS) is a disabling neurological disease of the CNS with a challenging clinical course. Nowadays there is no cure for the disease, thus symptom management is critically important to the quality of life of these patients. The majority of MS patients come up with variable urological signs and symptoms. Many symptoms may have different causes especially in these neurogenic patients. The appropriate diagnosis based on urodynamics, is essential for the appropriate management. In this study we estimate the prevalence of different urodynamic observations among men and women with MS and Low Urinary Track Symptoms (LUTS).

Study design, materials and methods

We studied 243 consecutive patients with definite MS (according to the diagnostic criteria proposed by McDonald) which were followed up periodically in our hospital. The onset of the disease was from 1 to 34 years. Urological evaluation performed by an urologist after clinical examination and face-to-face interview with the patient. Symptoms were divided to storage, voiding and post micturition [1]. Patients with no LUTS and patients with other concomitant neurological, endocrinological, vascular, gynecological and urological disorders were excluded from the study. All the others (187 patients, 112 women and 75 men) underwent urodynamics and post-void residual urine measurement. We categorized the urodynamic observations as detrusor-sphincter dyssynergia, detrusor overactivity, detrusor underactivity and acontractile detrusor [1].

Results

All the patients had mixed symptoms. Detrusor overactivity, detrusor-sphincter dyssynergia, detrusor underactivity and detrusor with normal activity were founded in 112 (59.8%), 22 (11.7%), 32 (17.11%) and 21 (11.22%) patients respectively. No patient presented in urodynamic study with acontractile detrusor. In 19 patients (10.1%) the post void residual (PVR) was > 100ml.

Interpretation of results

The present study evaluated the urodynamic observations in patients with MS and LUTS. The symptoms were not predicted for the urodynamic findings [2]. Increased PVR was associated with detrusor-sphincter dyssynergia and/or detrusor underactivity. Most of the patient presented with detrusor overactivity. Nevertheless in this study, we did not identify certain clinical factors (course and type of the disease or time from the onset), that are associated with an increased risk of detrusor overactivity in patients with MS.

Concluding message

The evaluation of the lower urinary tract disorders associated with MS requires an understanding of the pathophysiology of this neurologic disease. The reason for urodynamic studies in patients with MS before any type of treatment is to establish a clear-cut diagnosis, and thus help ensure that the most appropriate treatment is selected [3]. Without urodynamic evaluation it is difficult to determine the failure of the initial treatment or whether another treatment would be more appropriate.

References

1. Urology. 2003 Jan;61(1):37-49
2. Int Urogynecol J Pelvic Floor Dysfunct. 1999;10(2):139-43
3. Nat Clin Pract Urol. 2005 Oct;2(10):492-501

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<i>Is this a clinical trial?</i>	Yes
<i>Is this study registered in a public clinical trials registry?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	it has to do with every day clinical practice. We do not need ethics committee approval in order to apply urodynamics to patients which have the appropriate indication
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes