

CORRELATION BETWEEN LOWER URINARY TRACT SYMPTOMS AND SEXUAL DYSFUNCTION IN MULTIPLE SCLEROSIS.

Hypothesis / aims of study

The most common lower urinary tract symptoms (LUTS) in multiple sclerosis (MS) are irritative (urinary frequency, urgency and urge incontinence), obstructive (hesitancy, decreased force of stream, intermittency, straining to void, prolonged emptying time feeling of incomplete voiding, urinary retention) or mixed (association of irritative and obstructive LUTS). Sexual dysfunctions (SD) are significantly important, but often underestimated symptoms of MS, and are also commonly reported in these patients: they are represented by anorgasmia or hyporgasmia, decreased vaginal lubrication, and reduced libido in women; impotence or erectile dysfunction, ejaculatory dysfunction and/or orgasmic dysfunction, reduced libido in men.

The aim of our study was to find the relation between LUTS and SD in MS patients.

Study design, materials and methods

We studied a group (48 subjects; 33 females and 15 males) of consecutive chronic progressive multiple sclerosis patients. The patients were evaluated with Expanded Disability Status Scale (EDSS), Mini Mental State Evaluation (MMSE), Beck Depression Inventory (BDI), Cognitive Behavioral Assessment or CBA (Stait-Traite Anxiety Inventory), SF 12 health survey, QUALIVEEN questionnaire (that is an urinary disorder specific health related quality of life inventory) and MSISQ (that is a Multiple Sclerosis Intimacy and Sexuality Questionnaire)[1].

We divided the sample into two groups. Patients who declared almost one vesicourethral symptom composed the first group; in the second group were collected data about patients who didn't declare any vesicourethral symptomatology (control group).

Results

Our results show that patients who presented LUTS differ from the control group in MSISQ total score ($p=0,035$). Interestingly, we found a statistical difference only in one of the three subscales that constitutes the MSISQ. In particular, there were no difference in primary sexual dysfunction ($p=0,15$) (that comes as a result of the neurological changes that affect the sexual response in both men and women), secondary sexual dysfunction ($p=0,13$) (like muscle weakness, tremor, and impairments in attention and concentration), but only in the tertiary sexual dysfunction ($p=0,013$) (the changes in self-perceived body image and self-esteem). Nevertheless the two groups differ in the score of BDI ($p=0,02$). We didn't find any other statistical differences in the studied variables (Table 1).

Interpretation of results

LUTS and SD may occur in MS even in the absence of severe disability, and they have a significant impact in the quality of life (QoL) of MS patients. Our data indicated that SD was frequent and strongly related with LUTS in patients with MS. The findings also indicated that psychological factors were the most important contributing variables to SD in women with LUTS. The role of depression may be a prominent variable contributing to the sexual difficulties.

Table 1. Descriptive statistics about variables considered in the study

Variable	Patients with LUTS				Control group				p value*
	Mean \pm SD	Median	IQR	Min-Max	Mean \pm SD	Median	IQR	Min-Max	
Age	41.04 \pm 8.9	52	44-58	31-66	39.71 \pm 10.78	36	29-50	28-56	0.11
Years of illness	13.48 \pm 8.5	11	7-18	1-32	14.57 \pm 6.6	13	9-22	7-25	0.5
MMSE	29.7 \pm 0.6	30	30-30	27-30	30 \pm 0	30	30-30	30-30	0.15
EDSS	4.82 \pm 1.95	4.5	3.5-6.5	1-8.5	4.35 \pm 1.99	4	3-6.5	1.5-6.5	0.53
Qualiveen (tot score)	26.4 \pm 16.5	25	12-39	0-60	0	0	0	0	-
Discomfort	7.21 \pm 5.57	6	3-11	0-22	0	0	0	0	-
Limitations	10.51 \pm 7.4	9	6-15	0-27	0	0	0	0	-
Fears	4.9 \pm 4.53	4	2-7	0-17	0	0	0	0	-
Sensations	3.75 \pm 3.97	3	0-5	0-15	0	0	0	0	-
BDI	12.21 \pm 6.6	11	7-18	0-26	6.57 \pm 3.59	7	3-10	2-11	0.02
CBA	44.34 \pm 9.8	46	37-51	26-65	41.28 \pm 10.85	45	31-51	26-54	0.45
MSISQ 1	12.76 \pm 6.03	12.5	8-18	0-23	8.83 \pm 4.7	6.5	6-12	5-17	0.15
MSISQ 2	16.26 \pm 5.59	16.5	11-20	0-25	13.66 \pm 4.45	14	9-15	9-21	0.13
MSISQ 3	11.7 \pm 5.81	12.5	7-16	0-24	6.16 \pm 2.85	5	5-5	5-12	0.013
MSISQ TOTAL	40.6 \pm 15.21	41.5	28-51	0-66	28.66 \pm 5.31	31	26-32	19-33	0.035

Concluding message

Physician's and psychologist's awareness of LUTS and SD in MS may help to program appropriate treatments: in particular neurologists must early approach the lower urinary tract and depressive symptoms of these patients in order to improve their QoL.

References

1. Bonniaud V, Parratte B, Amarenco G et al. Measuring quality of life in Multiple Sclerosis patients with urinary disorders using the Qualiveen questionnaire. Arch Phys Med Rehabil 2004;85:1317-23

Disclosures

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