



19th PAUNS Meeting

31st STN Meeting | 10th TCNA Meeting

23rd – 24th MAY 2025
Yasmine Hammamet Tunisia



Title	Residual symptoms in patients with multiple sclerosis
Authors	K.OUCHEN, S.BOUCAL, N.CHTAOU, A.EL MIDAUI, MF.BELAHSEN
Affiliation	Neurology Department, Hassan II University Hospital of Fez, Morocco

INTRODUCTION

Multiple sclerosis (MS) is the most common chronic inflammatory disease of the central nervous system and constitutes the leading cause of non-traumatic disability in young adults. **Disease-modifying therapies (DMTs)** aim to reduce the frequency of relapses and slow the progression of disability. Nevertheless, many patients continue to experience **residual symptoms that can severely impact their quality of life**.

AIM

The aim of our study is to determine **the prevalence of residual symptoms** outside of relapses in patients with MS, and to describe **their management**.

METHODS

This **retrospective** study was conducted in the Neurology Department of Hassan II University Hospital in Fez. Medical records of patients diagnosed with MS were reviewed to identify residual symptoms occurring outside of relapse periods and to assess how these symptoms were managed.

RESULTS (1)

We included **100** patients with a mean age of **41.52** years and a female-to-male ratio of **2.33**. Most had relapsing-remitting MS (**87%**), while 13% had a progressive form. The average diagnostic delay was **46** months, with a mean disease duration of **10.5** years and a mean EDSS score of **3**. High-efficacy treatments were prescribed in 93 patients, primarily anti-CD20 therapies (55%).

Only 5 patients were free of residual symptoms.

The most frequent **urinary disorder** was **urgency**, reported in 41 cases, though only 25 patients mentioned it spontaneously. Urinary symptoms were significantly associated with **EDSS score** ($p < 0.001$), **disease duration** ($p < 0.001$), and **age** ($p = 0.036$).

Constipation affected 29 patients and was significantly related to EDSS.

Fatigue was present in most patients (mild in 40%, moderate in 20%, severe in 18%) and also associated with **EDSS**. Management focused on optimizing physical activity for all patients.

Neuropathic pain and paresthesia were the most frequent **sensory symptoms**, affecting 38 patients. Management was primarily based on **antiepileptic drugs**, although some patients, particularly those with trigeminal neuralgia, required multiple treatments during follow-up.

Spasticity was observed in 13 patients, typically after 9 years of disease evolution, and was more frequent in **progressive forms**.

RESULTS (2)

Cognitive symptoms were common, with 29 patients affected early in the disease course. The average SDMT score was lower in patients with cognitive impairment (22 vs. 33). All were advised to maintain regular mental activity.

Sexual dysfunction affected 22 of the 43 sexually active patients (51.16%), but only 4 had previously reported it to their physician. None had been routinely screened for sexual issues.

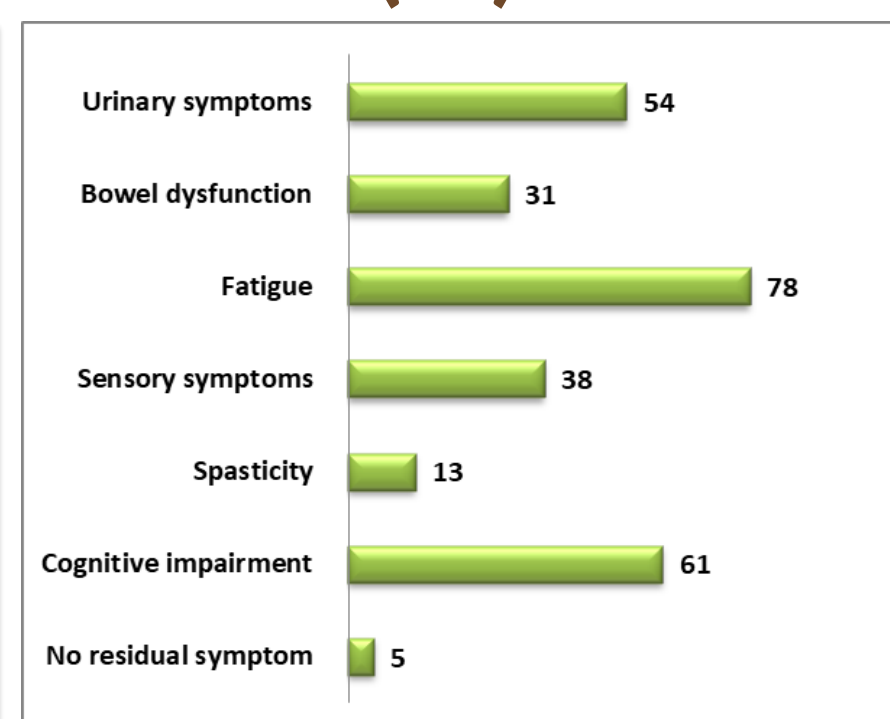


Figure: Breakdown of residual symptoms among patients in our cohort

DISCUSSION

Urinary disorders are frequent in patients with MS reaching **16.6%** in European countries and up to **30.7%** in the United States. The most common symptom is **bladder overactivity**, typically related to detrusor dysfunction [1].

Bowel dysfunction affects up to 50% of patients and is often multifactorial [3]. **Sexual dysfunction** is common, with an overall prevalence of approximately 52%, but **rarely reported spontaneously**, underlining the need for systematic evaluation in clinical practice [1, 2]. In our study, sexual dysfunction was observed in 52% of sexually active patients, yet only 3% spontaneously reported it, highlighting the importance of systematically addressing sexual health during clinical evaluations due to its major impact on quality of life.

Fatigue and **cognitive impairment** are also widespread and tend to worsen with disease progression [4, 5]. Some symptoms, such as spasticity, are more common in **progressive forms**. **The accumulation** of these residual symptoms further compromises patient well-being and highlights the importance of comprehensive symptom management in MS care.

CONCLUSION

The management of patients with multiple sclerosis **should not be limited to disease-modifying therapies**. It must also include the screening, evaluation, and treatment of **residual symptoms**—particularly sphincter and sexual dysfunctions—which have a **significant impact** on quality of life.

REFERENCES

- 1-F.Abd et al. Urinary Disorders and Sexual Dysfunction in Patients with Multiple Sclerosis: A Systematic Review and Meta-Analysis. INTERNATIONAL JOURNAL OF SEXUAL HEALTH
- 2-M. Petracca et al. Sexual dysfunction in multiple sclerosis: The impact of different MSISQ-19 cut-offs on prevalence and associated risk factors. Multiple Sclerosis and Related Disorders 78 (2023) 104907.
- 3-Giuseppe Preziosi, Ayesha Gordon-Dixon, Anton Emmanuel. Neurogenic bowel dysfunction in patients with multiple sclerosis: prevalence, impact, and management strategies. Degener Neurol Neuromuscul Dis. 2018 Dec 6;8:79–90.
- 4-Olivia Ramirez, A., Keenan, A., Kalau, O. et al. Prevalence and burden of multiple sclerosis-related fatigue: a systematic literature review. BMC Neurol 21, 468 (2021).
- 5-Emilio Portaccio, and Maria Pia Amato. Cognitive Impairment in Multiple Sclerosis: An Update on Assessment and Management. NeuroSci 2022, 3(4), 667-676.