E-Poster

EP-553

Neurogenic Bowel Dysfunction in Spinal Cord Injury Patients: Typology, Severity, and Functional Impact

Topic: Complications/Sequelae (ie Spasticity, Immobilization and Frailty)

Emna Bahlouli[1], Hend Belhaj Othman[1], Amani Mehrzia Khezami[1], Leila Ghidaoui[2], Ines Aloulou[2], Imen Miri[2], Catherine Dziri[2], Sonia Lebib[1]

[1]*Physical Medicine and Rehabilitation Department B, Kassab Institute of Orthopedics, Tunis, Tunisia*
[2]*Physical Medicine and Rehabilitation Department A, Kassab Institute of Orthopedics, Tunis, Tunisia*

BACKGROUND

Neurogenic bowel dysfunction (NBD) is a common consequence of spinal cord injury (SCI), impacting daily activities and quality of life (QoL). This study aimed to characterize the clinical presentation of NBD in SCI patients and assess its impact on QoL.

METHODS

We conducted a cross-sectional descriptive study on paraplegic patients with SCI lasting for at least one year, followed at Physical Medicine and Functional Rehabilitation Department of the Kassab Institute of orthopedics between January and March 2024. Data collection included a predefined questionnaire assessing NBD typology and complications, severity using the Neurogenic Bowel Dysfunction (NBD) score (validated in Arabic), impact on QoL using the SF-12 score (validated in Arabic).

RESULTS

A total of 30 patients were included (mean age 37 ± 9 years, male-to-female ratio 1.72), with 93% unemployed. The mean duration of paraplegia was seven years (range: 1–30 years), primarily due to vertebral-medullary trauma (93%), with complete injuries (80%) being predominant. The most common bowel disorders were constipation (67%) and anal incontinence (77%), with a mean NBD score of 11.2 ± 6.74. Neurogenic bowel dysfunction severity was significantly correlated with spastic perineum ($p = 0.010$). Anal bleeding (37%) was the most frequent proctological complication, primarily associated with constipation. Management was often multimodal, involving digital maneuvers (40%) and pharmacological treatments such as oral and/or rectal laxatives (37%). Higher NBD scores were strongly associated with a decline in the physical component of the SF-12 QoL score ($p < 0.001$).

CONCLUSION

Our study highlights the high prevalence and severity of constipation and anal incontinence in SCI patients, leading to frequent proctological complications and impaired QoL. Despite the use of multimodal therapeutic approaches, current management strategies remain insufficient, emphasizing the need for personalized, multidisciplinary interventions to improve patient outcomes.

Statement of Disclosures

None

Doi: 10.5606/archisprm.2026.EP-553

Corresponding Author:
Emna Bahlouli
Physical Medicine and Rehabilitation Department B, Kassab Institute of Orthopedics, Tunis, Tunisia
Email: emnabahlouli@yahoo.fr