E-Poster

EP-178

Relationship Between Neurological Level of Spinal Cord Injury and Urodynamic Profile

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

Kyal Nada, El Beloui Ryme, Boutalja Hasnaa, El Achkoura Jihad, Lmidmani Fatima, El Fatimi Abdellatif

Physical Medicine and Rehabilitation, CHU Ibn Rochd, Casablanca, Morocco

BACKGROUND

The prevalence of neurogenic lower urinary tract dysfunction (NLUTD) in patients with spinal cord injury (SCI) is notably high. Both neurological signs and lower urinary tract symptoms are determined by factors such as the level, extent and completeness of the injury. The overall prognosis of these patients is largely influenced by urological management, which should be guided by an accurate assessment of lover urinary tract impairment using urodynamic studies (UDS).

This study aims to compare the relationship between the neurological level of SCI and bladder function as assessed through UDS.

METHODS

This is a retrospective study including 78 patients with SCI who were recruited in the department of Physical Medicine and Rehabilitation. A clinical and neurological evaluation was conducted following the American Spinal Injury Association (ASIA) classification, along with magnetic resonance imaging (MRI) assessments, ultrasound evaluation of the bladder and UDS.

RESULTS

Among the 70 patients with suprasacral injury, 82.8% had detrusor overactivity with or without detrusor sphincter dyssynergia. 8.6% had detrusor areflexia and 8.6% had normal bladder function. Additionally, 46 patients demonstrated low bladder compliance (<30 cmH2O).

In contrast, among the eight patients with sacral injuries, two (25%) exhibited detrusor overactivity, while six (75%) had detrusor areflexia. One (12.5%) patient had low bladder compliance, and all eight demonstrated high detrusor leak point pressures.

CONCLUSION

The correlation between somatic neurological findings, spinal imaging results, and UDS in SCI patients is not always present. Therefore, bladder management should not be based only on clinical or neurological examinations. Instead, UDS should be an integral part of the assessment to ensure appropriate and individualized management of NLUTD.

Statement of Disclosures

None

Corresponding Author:
Kyal Nada
Physical Medicine and Rehabilitation, CHU Ibn Rochd, Casablanca, Morocco
Email: nadakyal@gmail.com

Doi: 10.5606/archisprm.2026.EP-178