E-Poster

EP-693

The Role of Early Urodynamic Assessment in Managing Neurogenic Bladder After Post-Infectious Paraplegia: A Case Report

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

Mohamed Mehdi Naciri, Fatima Ezzahra Khadim, Meriem Bourharbal, Mohamed Mehdi Kouadssi, Kenza Ouider, Meryem El Majidi, Asmae Hanafi, Youness Abdelfettah

Service of Physical Medicine and Rehabilitation, Mohammed VI University Hospital Center, Marrakech, Morocco

BACKGROUND

Urodynamic assessment is a fundamental examination for evaluating urinary function and diagnosing lower urinary tract disorders. It provides essential insights into the dynamics of the bladder and urethra, enabling healthcare professionals to identify functional abnormalities and guide treatment strategies effectively. This examination is particularly valuable in patients with neurological conditions, where the mechanisms controlling micturition may be impaired.

The significance of urodynamic testing lies in its ability to objectively assess symptoms such as incontinence, dysuria, and retention, and to evaluate the risk of complications like urinary tract infections or renal damage.

CASE DESCRIPTION

A 19-year-old male with no significant medical history presented with flaccid paraplegia following post-viral myelitis. He was unable to walk and used a manual wheelchair for mobility. Muscle strength was preserved at 5/5 in the upper limbs, while lower limb strength was absent (0/5). Sensory examination revealed a level at T11, with saddle anesthesia. Urological assessment indicated urinary and fecal incontinence.

Initial Urodynamic Assessment:

The first urodynamic evaluation revealed a neurogenic bladder with dysuric and retention-type characteristics, elevated baseline tone, and frequent urinary leaks.

Treatment:

The patient commenced a treatment regimen including intermittent catheterization and anticholinergic therapy. Six months later, a follow-up urodynamic assessment demonstrated significant improvement in both clinical and urodynamic parameters.

DISCUSSION

Urodynamic evaluation is crucial in managing urinary dysfunction in patients with spinal cord injuries or neurological impairments, such as post-infectious paraplegia. Early intervention with comprehensive management, including intermittent catheterization and anticholinergic therapy, optimizes bladder function and reduces the risk of long-term complications like urinary tract infections and renal damage. This case underscores the effectiveness of early urodynamic follow-up in enhancing the patient's quality of life and functional outcomes.

CONCLUSION

Effective bladder management reduces urinary infections and kidney damage while improving quality of life. It enhances autonomy, lowers psychological distress, and boosts wellbeing. Early, comprehensive urological care is essential for rehabilitating individuals with spinal cord injuries.

Statement of Disclosures

None

Doi: 10.5606/archisprm.2026.EP-693

Corresponding Author:
Mohamed Mehdi Naciri
Service of Physical Medicine and Rehabilitation, Mohammed VI University Hospital Center, Marrakech, Morocco
Email: naciri95mehdi@gmail.com