E-Poster

EP-189

Neurogenic Paraosteoarthropathy: An Atypical Indication for Extracorporeal Shock Wave Therapy and an Atypical Protocol - Case Report

Topic: Miscellaneous

Najia Hajjioui[1], Zouhayr Souirti[2], Abderrazak Hajjioui[3]

[1]*Department of Physical and Rehabilitation Medicine, Hassan II University Hospital, Fez, Morocco, Faculty of Medicine and Pharmacy, Sidi Mohamed Ben Abdallah University, Fez, Morocco*

[2]*Department of Neurology, Hassan II University Hospital, Fez, Morocco, Faculty of Medicine and Pharmacy, Sidi Mohamed Ben Abdallah University, Fez, Morocco*

[3]*Department of Physical and Rehabilitation Medicine, Mohammed VI University Hospital Center - Tangier, Abdelmalek Essaâdi University, Tangier, Morocco*

BACKGROUND

Neurogenic paraosteoarthropathies (NPOA) often represent formidable complications in physical medicine and rehabilitation (PMR), due to the functional limitations they cause. In the context of conservative treatments, extracorporeal shock wave therapy (ESWT) can offer a non-invasive alternative to manage secondary functional limitations. This study aims to evaluate the effects of ESWT on disabling paraosteoarthropathies.

CASE DESCRIPTION

A 20 year old patient was admitted for severe NPOA, occurring in the context of myelitis, upon admission to the PMR service. The patient presented significant functional limitations and was dependent on assistance for mobility, having also interrupted his studies due to his condition. Extracorporeal shock wave therapy was proposed, and the patient underwent nine sessions. Each session was applied to several areas, including both hips and knees, with a specific protocol tailored to the treated area. A comprehensive evaluation was conducted before and after the treatment, including pain assessment (using the visual analog scale), joint range of motion, muscle testing within the allowed ranges, and measurement of the walking perimeter with a 6-minute walking test. Radiological evaluation was performed using standard radiographs and a computed tomography scan.

DISCUSSION

The results of the shock wave therapy were positive, showing significant improvements. The treatment had a notable impact on the patient's quality of life, allowing him to resume his studies. Not only did the patient regain the ability to walk without technical assistance, but clinical tests also revealed improvements in joint range of motion, muscle strength, and walking pattern. The walking perimeter also increased.

CONCLUSION

This case demonstrates the effectiveness of shock wave therapy in managing NPOA. The established protocol allowed the patient to regain significant functional independence. This non-invasive treatment, with measurable results, represents a promising therapeutic alternative. However, further studies are needed to confirm these results.

Statement of Disclosures

None

Doi: 10.5606/archisprm.2026.EP-189

Corresponding Author:
Najia Hajjioui
Department of Physical and Rehabilitation Medicine, Hassan II University Hospital, Fez, Morocco, Faculty of Medicine and Pharmacy, Sidi Mohamed Ben Abdallah University, Fez, Morocco
Email: najia.hajjioui@usmba.ac.ma