E-Poster

EP-154

Efficacy of Ankle-Foot Orthoses on Gait in Children With Cerebral Palsy

Topic: Specific Target Groups (Children, Women, Elderly, Athletes, Musicians, Refugees, Ethnic Groups, Workers, and Others)

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

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

BACKGROUND

Ankle-foot orthoses (AFOs) are used in children with cerebral palsy (CP) to improve gait and stability. Their effectiveness varies depending on the severity of CP. This study aims to evaluate the effectiveness of AFOs in improving gait patterns in children with CP by analyzing gait parameters.

METHODS

This prospective analytical study included children with CP recruited from a physical medicine and rehabilitation department. Patients were prescribed AFOs, and gait parameters (step count, step length, cadence, and walking speed) were assessed with and without AFOs.

RESULTS

A total of 68 patients were included, with a mean age of 9.2 years. Among them, 43.9% had spastic tetraparesis. Gait analysis showed improvements in step count for 100 meters, step length, cadence, and walking speed when using AFOs compared to barefoot walking.

CONCLUSION

Some studies report significant gait parameter improvements with AFOs, while others show no notable changes. AFOs should be integrated into a comprehensive treatment plan, including motor rehabilitation, occupational therapy, and other therapeutic interventions. They are valuable tools that provide support, enhance stability, and reduce the risk of falls.

Statement of Disclosures

None

Doi: 10.5606/archisprm.2026.EP-154

Corresponding Author:
El Beloui Ryme
Physical Medicine and Rehabilitation, CHU Ibn Rochd, Casablanca, Morocco
Email: el.ryme@gmail.com