

Hemiplegic patient with unstable ankle movement and at high risk of inversion trauma now has no pain or trauma by using the Ambulatory ADM



Patient details

Initials: JH
Age: 7 years old
Gender: Female

Background

JH has a right hemiplegia, hydrocephalus – VP shunt in situ and episodes of right focal seizures with occasional generalisation.

Previous treatments include conventional ankle foot orthotic (AFO) however JH developed a bursa over her right lateral malleoli due to pressure from the splint, repeated splint changes would solve the problem for a short time but it would reoccur.

In bare feet her right foot contacted the ground with a lateral border strike, the heel remained inverted throughout stance and medial foot contact occurred in the forefoot only at toe off. JH's barefoot walking and foot posture means that her ankle is unstable and it was agreed that she needed something to reduce the risk of inversion sprains/ trauma. In her AFO she achieves a better heel strike and weight transference but the bursa and bursitis were becoming a significant problem.

JH was provided with an Ambulatory Abduction Dorsiflexion Mechanism (ADM) fitted to a black New Balance shoe.

Experience

In her Ambulatory ADM JH has heel strike and some improvement in forefoot weight bearing but most importantly no soft tissue trauma.

Since using the Ambulatory ADM JH's bursa has considerably improved and she has no pain.

She recently saw an orthopaedic surgeon for an opinion and her surgeon described the Ambulatory ADM as "excellent". JH is continuing to use her Ambulatory ADM, now awaiting surgery for "guided growth with medial malleolar screw" and her surgeon has advised to continue with her Ambulatory ADM following the surgery.

Conclusions

Whilst there has been some minimal improvement in her gait the huge benefit of the Ambulatory ADM for JH over a conventional AFO is that she no longer has pain and chronic bursitis. Her progress will continue to be monitored over the coming months and following her surgery.

About the ADM

The ADM was launched in March 2014 and is a wholly new type of Ankle Foot Orthosis that includes two sprung-loaded mechanisms aligned to the sub-talar and tibio-talar joints. The ADM was originally developed as night-brace to abduct and dorsiflex the feet of clubfoot patients. When attached to daytime shoes the ADM can improve the gait, mobility and balance of those suffering from a range of conditions.

The ADM is developed and manufactured in by C-Pro Direct Ltd in the UK. C-Pro Direct welcomes enquiries from practitioners, parents and clinicians. The ADM is Patented in many jurisdictions worldwide. For Europe EP Patent No EP2637612 and Registered Community Design No 002238881-0001 apply.