

Clubfoot patient struggling to walk with severe hypermobility maintains correction and becomes able to walk using bilateral Non-Ambulatory ADMs



Patient details

Initials: LM
Age: 3.5 years
Gender: Female

Background

LM was born with severe bilateral talipes in July 2013. She began serial casting at the age of six weeks, with weekly cast changes for seven weeks followed by a tenotomy and a further three weeks of casting. Upon removal of her final cast LM went into the traditional boots and bar. She wore this brace 23 hours a day for four months. LM suffered from near constant blisters and sores on her feet for this whole period. Despite these clearly painful issues, LM tolerated the brace well. At eight months old LM graduated to night-wear only. LM only occasionally awoke in pain at night, and never minded having her boots and bar put on each night, so whilst her parents didn't feel that her being strapped up at night and in daily discomfort was a great treatment option for their daughter, they had no concerns about continuing with the boots and bar until it came to walking.

At thirteen months old LM took her first steps. A month later she had progressed no further, her knees kept buckling and twisting under her weight, and by fifteen months old she had stopped even attempting to walk. Her parents began to notice that at night LM was sleeping with her knees twisted round nearly completely backward in her boots and bar. They took her to a GP where she was quickly referred to a podiatrist. The podiatrist diagnosed her with hypermobility. The podiatrist suggested that they go back to their orthopaedic consultant and consider a different option from the boots and bar, as whilst they were maintaining the correction in her feet, they were causing a problem for her knees and that she was unlikely to begin walking whilst she was wearing the brace every night.

In collaboration with C-Pro Direct her parents decided to proceed with the ADM as an alternative to the boots and bar at seventeen months of age.

Experience

LM wore the ADM between seventeen and thirty eight months of age. In that time LM did not have a single blister or sore and she began confidently walking within just one week of wear. She has been able to sleep comfortably with nothing inhibiting her movement, and her parents have been able to potty train her, knowing that she can get herself to the bathroom comfortably in her ADMs, unlike the traditional boots and bar brace.

Her feet maintained an excellent correction and at three years and two months old she discontinued treatment altogether. This is much earlier than standard ponseti treatment because LM has quite severe hypermobility and so there is a risk of over correction with further wear. She has now been out of her ADMs for four months and her parents have no concerns about possible relapses. Her mother said: "I feel very comfortable in the knowledge that as the ADMs are so comfortable and do not disrupt her sleep at all, that should the worst happen, she will happily return to wearing her ADMs."

Conclusions

In conclusion, indications are that two years of ADM use has successfully prevented relapse in LM's feet. Her mother, added "Our journey to getting the ADM was quite a difficult one, our physician was not supportive of our wish to explore other treatment options. We made the difficult decision to go ahead and fund the ADM ourselves, we took LM to her podiatrist to help us fit the ADMs (although this turned out to be unnecessary; they are very easy to fit, they just needed to assess that the spring strength was adequate for her) and assess their suitability. LM continued to have six monthly check ups with her consultant, who was consistently pleased with her progress (though he buried his head in the sand as to which brace we chose to use) and also had six monthly check ups with her podiatrist. We timed these so she was being monitored every three months so that we could catch any relapse at the earliest opportunity. I cannot tell you how delighted we have been with the ADMs. They have allowed my daughter to sleep comfortably, they have given her no sores or blisters, and gave her knees a chance to strengthen, and to walk."