

Client: Lochlann

PT/OT/Supplier: Kieran Murphy, PT

Location: Manchester, United Kingdom

Lochlann is an 18-year-old man with a diagnosis of cerebral palsy and dystonia equivalent to GMFCS Level V. He lives at home with his parents. He loves to move, listen to music, and socialise with his friends. Kieran Murphy is a paediatric physiotherapist working in the NHS (National Health Service, England), for his own company privately and for paediatric equipment manufacturer Jenx.



The Problem

Lochlann is affected by a strong extensor pattern and strong retained startle and asymmetric tonic neck reflexes which can lead to discomfort, distress, and damage to his seating system. He also seeks movement and enjoys being able to move within his seating system but requires the appropriate support to achieve this due to his impaired postural control and weakness throughout his body.

Lochlann currently uses a seating system with a dynamic back (R82 X:Panda) to help diffuse extensor force through his trunk and enable movement without loss of his stable seated position. However, he continued to extend and rotate heavily through his cervical spine. The head support mounting hardware would warp with his habitual head posture of cervical side flexion down to the right and rotation to the left. Damage and breakage occurred throughout this static head support and included wearing of his head pad covers. Lochlann also experienced discomfort around his head and neck area and balding around the right lateral aspect of his occiput from friction against the head pads.



Static head support – front



Static head support - side

Quick Notes

Challenges:

- ✓ Extension
- ✓ Primitive Reflexes
- ✓ Dystonia
- ✓ Wear and Tear on equipment
- √ Seeking Movement
- ✓ Discomfort

Areas affected:

- ✓ Back
- √ Head

Equipment Used:

- ✓R82 X:Panda Dynamic
 - Back
- ✓ Dynamic Head Support











The Solution: Head

Lochlann had bent the mounting hardware on his previous head support, which requires incredible force, and had experienced balding due to the high pressure and friction occurring between his head and the head pads.

Lochlann's parents and Kieran worked with the team at Seating Dynamics to source dynamic head support hardware that could be mounted to his current seating system, using a universal mount. The goal was to diffuse the force from his extension and rotation adequately. In turn, it was hoped this would reduce equipment breakage, reduce balding, and improve his comfort in the seating system.

Results

The head support is no longer warping and breaking as a result of Lochlann's posturing, thanks to the dynamic movement which diffuses the force of his active rotation and extension. The mounting hardware is also more appropriate as this provides more specific placement and accommodation for asymmetry.

Click <u>here</u> to view a video of Lochlann using his new dynamic head support!

Lochlann's parents, Manchester, UK

"The new dynamic head support seems to be working really well for Lochlann. He seems to be experiencing less pain and tension in his neck and shoulders. His hair is also not being rubbed away as much as with the static head support.

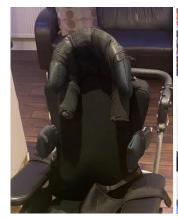
As you can see from the video, when we ask him, he tells us he likes it!

We are really pleased with it so far."

Update on Lochlann

Lochlann has been using the Seating Dynamics Head Support Hardware for 12 months now and the results continue to be positive. There is very little wear on the head pad compared to the wear and warping that happened when using the previous static hardware. Lochlann is experiencing much less balding around his occiput, with hair regrowth! Most importantly, Lochlann is happy, and so much more comfortable in his seat with the dynamic headrest hardware in place.

"Thanks again to the team at Seating Dynamics for a brilliantly innovative product."







(current head pad)











About the Author

Kieran Murphy is a paediatric physiotherapist working in the NHS (National Health Service, England), for his own company privately and for paediatric equipment manufacturer Jenx.



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