South Wales Posture and Mobility Service, Clinical Team: Case Study

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Summary

12-year-old with Cerebral Palsy referred back into the service as needs no longer being fully met. Main issues reported as poor head position and leaning over time, also not tolerating very long in the seating, indicating reduced comfort. Exploration of suitable equipment, its provision and ongoing issues once prescribed.

Aims and Objectives

- Share a case study and the approach taken to address various needs, including posture, comfort and practical use.
- Share the challenges encountered and what worked well, including equipment choice and internal process considerations.
- Share the challenges that remained/developed and what other options were explored.

Background

On assessment:

- Change in presentation, no longer extending at hips with increased tone.
- Low tone.
- Reduced head control, further exacerbated by limitations of head position due to concern over aspiration on saliva.
- Family and carers opting to encourage head slightly forwards which is then falling forwards.
- No independent sitting balance.
- Posterior pelvic tilt, mostly correctable.
- Significant kyphosis, flexible.
- Very heavy to correct pelvic and trunk deviations.
- Confusion by multiple care providers regarding set up of seating, as previously seat cushion has been found to be fitted back to front.

Analysis/considerations

- Good position not always being maintained when in use at home and in school.
- Comfort is not provided in current seating.
- Requirement to keep head in very slightly forwards position is extremely difficult to maintain.
- Complex headrest with facial pads ruled out due to risks associated with seizures.
- Rollercoaster headrest trialled but although initially successful, head continued to fall forwards.
- Moulded seating requested by community physiotherapist. This had been discussed
 at single point of referral and reviewed jointly with a Clinical Scientist. Agreed that
 moulded seating was not suitable to provide solution for head position and would be
 difficult to adjust to accommodate growth.

- Due to very heavy lean, increased support to lateral trunk with maximal surface area contact would be advantageous.
- Increased trunk support may also help head position and stability.
- Fairly new type of backrest V-Trak was off contract but would potentially offer increased trunk support and strong posterior pelvic block.
- V-Trak backrest is segmented therefore middle segment can be adjusted to support lumbar lordosis and encourage trunk extension.

Trial

- V-Trak backrest fitted to Rea Azalea transit base.
- RMS seat cushion working well therefore transferred across.
- Achieved increased lateral trunk support, less likely to lean over the lateral aspect.
- Achieved effective posterior pelvic block and enhanced support of lumbar region, encouraging extension of trunk.
- Type G Headrest transferred across, continues to offer support posteriorly and laterally.
- A referral to be made to orthotics to request a bespoke collar that can be used as required (e.g. in transport or over uneven terrain) as the Hensinger collar is too low.
- Increased support to trunk had positive impact on head position and the slightly forwards position was achieved and maintained.
- Education to family and carers on importance of not pushing head too far forwards and utilising tilt-in-space feature to help maintain position against gravity.
- V-Trak backrest does not require any adjustment therefore will be easy for all care providers to use consistently.
- Extremely successful trial, added pelvic belt and shoulder harness. Able to issue the wheelchair, V-Trak backrest and accessories on the same day.

Follow up

- Positioning guidelines provided.
- Link person for complex headrest.
- Follow up call with mum and residential home indicates that the seating is working well.
- 12-month review listed.

Discussion

Learning/future considerations

- Same day provision of wheelchair is optimal for our service users.
- Having stock of wheelchair and accessories enabled same day provision.
- Completing trial and issue of wheelchair in same appointment required more time for the appointment, but saved a future appointment being needed for fitting.
- Education and guidelines for carers/family is important.
- Regular input/review is helpful for certain service users.
- At times referral to other services such as orthotics should be considered.
- Forces being placed through equipment must be considered for ongoing use.

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