CASE STUDY

Mitch – Extension in the Shower!



Client: Mitch

PT/OT/Supplier: Bert Lindholm, ATP

Location: Littleton, CO

Mitch is a 54 year old man with the diagnosis of cerebral palsy. He is seated in a molded seating system (the Aspen Seating Orthosis) and uses an Invacare Torque power wheelchair (now discontinued) with a joystick. He will be receiving a Quantum Rehab R-Trak power wheelchair with power tilt and seat elevation soon. He lives in a residential setting with a roommate and paid caregivers.

Large and Forceful Movements

Mitch extends with force, primarily at the hips. He is already using a Seating Dynamics Dynamic Rocker Back interface (DRBi) on his current power wheelchair. The new power wheelchair will also include Dynamic Head Support Hardware.

His extension is also a challenge during showering. Mitch uses a RAZ shower chair, though this base has quite a bit of wear and tear secondary to his forceful movement. The head support is typically out of alignment, and the back canes are bent. The seating and mobility team were concerned that he was close to breaking the back canes, and could injure himself, as a result.

Posture

As Mitch extends within the current shower chair, he leverages off the back and pushes his pelvis forward. This moves him into a posterior pelvic tilt, his pressure distribution is not adequate as he is no longer aligned with the seat, and he is at risk of falling. He does have a pelvic belt, though this is not enough to maintain his position during showering.



RAZ AP Shower Chair

Shower chairs are not designed to provide as much postural support as a wheelchair seating system, however postural alignment within the shower chair support surfaces is critical to prevent shear forces and lack of pressure distribution against fragile, exposed skin.

Dynamic Seating

The current shower chair was quite worn, beyond reasonable repair, and required replacement. The seating and mobility team recommended a RAZ-AT tilt shower chair with mobile base. They also recommended a Seating Dynamics DRBi to absorb Mitch's extension forces and maintain his pelvic position within the shower chair. RAZ offers the Seating Dynamics Dynamic Rocker Back interface (DRBi) on many of their shower chairs.

Quick Notes

Challenges:

✓Strong extension

✓Equipment breakage

✓Injury Risk

Areas affected:

✓Back

✓Head

Equipment Used:

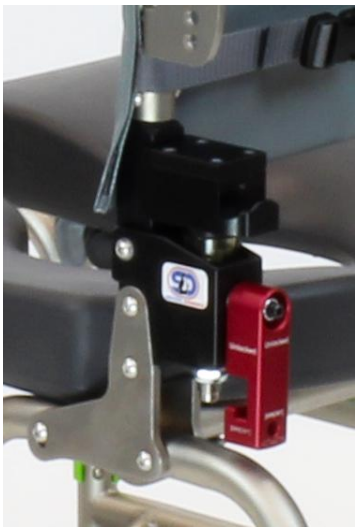
✓Dynamic Rocker Back

✓Dynamic Head Support Hardware

✓ RAZ-AT Shower Chair

✓ Quantum Rehab R-Trak power wheelchair

✓ Aspen Seating Orthosis



RAZ AP Shower Chair

Results

Mitch has been using the new shower chair for several months now. He is able to maintain postural alignment during his shower, as the DRBi is moving and absorbing forces from his hip extension. The head support is also staying in alignment, as his extension forces are so diffused at his hips.

The RAZ shower chairs are quite durable. The addition of the Dynamic Back will prolong the lifetime of this new shower chair, as well as minimize loss of alignment, shear forces, and pressure risk for Mitch.

Want to learn more about using the DRBi on RAZ shower chairs? Check out this blog.

About the Author

Michelle Lange is an occupational therapist with over 38 years of experience and has been in private practice, Access to Independence, for over 19 years where she currently focuses on education and consultation. She is a well-respected lecturer, both nationally and internationally, and has authored numerous texts, chapters, and articles. She is the co-editor of Seating and Wheeled Mobility: a clinical resource guide (1st & 2nd eds). Michelle is a RESNA Fellow and member of the Clinician Task Force. Michelle is a RESNA certified ATP and SMS.