CASE STUDY

Chris - Huntington's Disease and Dynamic Seating



Client: Christopher

PT/OT/Supplier: Faith Saftler Savage, PT, ATP

Location: Boston, MA

Christopher (Chris) is a 60 year old man with the diagnosis of Huntington's Disease (HD). His mother also had HD. He was evaluated for seating and wheeled mobility by Faith Saftler Savage, PT, ATP, an amazing clinician and colleague at The Boston Home.

September 2023

Chris was living at home with his wife and paid caregivers to assist with his care. He was still walking, though not safely or efficiently. He was first evaluated at another clinic who did not recommend a wheelchair as he was still ambulatory. As a result, he was using a transport chair.

Chris then went to the clinic at The Boston Home where he was evaluated by Faith. She noted that he was sitting in a posterior pelvic tilt and mild kyphosis. He demonstrated a significant amount of extraneous movement in his arms. Chris sat in a reclining "Lazy Boy" style chair at home. While walking, he hung onto furniture or other items in his environment. He experienced frequent falls and had balance issues; however, he had not yet injured himself as a result of falling.

As ambulation was unsafe, Faith recommended a PDG Fuze T50n manual tilt wheelchair. Chris did not have the potential to self-propel due to his involuntary arm movements. His home was small, and his wife wanted a wheelchair that would be easier to maneuver in his home. The narrow width of this wheelchair increased maneuverability and still provided a stable base to manage Chris's movement disorder. After trialing various seats and backs, a Jay Union cushion and a Ride Designs Java deep back were recommended. He also received a Whitmyer head support and gel arm pads (to protect his arms during movement). The goal of this equipment was to help maintain Chris's posture and provide stability, particularly for his legs. During the assessment and simulation process, Chris didn't demonstrate any excessive movement of his lower extremities or trunk. The seating system and wheelchair were delivered in December of 2023 and Chris looked great.

February 2024

Chris returned to clinic, and just about everything on his seating system and wheelchair needed to be tightened as a result of his constant movement. His forces were moving the Java Back out of position. He managed to move his angle adjustable footrest hangers out of position as his lower extremity forces were now strong enough to move the strong interlocking 'teeth' which set the knee angle. Chris then bent and broke the footrest hangers. Components were tightened, repaired, and replaced, as needed.

Chris's medical team was trialing various medications to better control his movements as medication that had been successful in the past was no longer as effective. Further seating recommendations were placed on hold while waiting to evaluate the impact these medication changes would have on Chris's seating needs.



Quick Notes

Challenges:

- ✓ Large, uncontrolled, forceful movements
- ✓ Wear and Tear on equipment
- ✓ Loss of position

Areas affected:

- √ Back
- ✓ Legs

Equipment Used:

- ✓ Dynamic Rocker Back
- ✓ <u>Dynamic Footrests</u>
- ✓ PDG Fuze T50
- √ Jay Union Cushion
- ✓ <u>Ride Designs Java deep</u> back











June 2024

After trying various medications without a significant impact on his large, forceful movements, Chris again returned to clinic and Faith knew that Dynamic Seating was required. She recommended a Seating Dynamics Dynamic Rocker Back interface (DRBi) and Dynamic Footrests. A tray was also added for Chris to stabilize his arms against. This equipment was delivered in August. By this time, Chris's tone was finally somewhat reduced with medication, though he still required Dynamic Seating.

The Dynamic Footrests worked very well. Even without his feet secured, Chris was able to readily activate this dynamic component. Faith believes this is due to his tendency to push downward before extending at the knee, as well as the sneakers he wears which have good tread to maintain contact with the footplates.





The DRBi made a big difference, as well. The dynamic back moved in response to Chris's extension and movement, diffusing these forces and allowing a return to upright sitting without a loss of alignment with the seating support surfaces.

October 2024

By October, Chris moved to a long-term care facility as his wife and in-home aids were no longer able to meet all of his care needs. Since receiving the Dynamic Back and Dynamic Footrests, Chris's

equipment has not required any repairs, he is comfortable, and he maintains his position in the seating system.

April 2025

Chris continues to do well in his wheelchair with no breakage noted of the footrests or the back support. However, it was determined that the dynamic back elastomers needed to be replaced since he was no longer returning to upright after pushing into extension.

To view videos of Chris in motion, click here.

Faith Saftler Savage, PT, ATP Boston, MA

"Dynamic Seating allowed Chris to move without destroying his wheelchair and without a loss of position."

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.









