

INDICATIONS & CONTRAINDICATIONS

Indications

- Spastic Hemiplegia
- Spastic Diplegia
- Spastic Quadriplegia
- Risk of hip displacement (both ambulatory and non-ambulatory)
- Low trunk tone (may require customized combination with spinal jacket).
- Post-Botulinum Toxin A (Focal spasticity management)
A three year, randomized multi-centre trial with concealed allocation to either BTX-A and bracing and/or observation concluded: "Injections of BTX-A combined with SWASH® bracing reduces the rate of hip displacement and delays the need for orthopaedic surgery".
- Post-operative - For stabilization when abduction in both flexion and extension is required.
- Night Splint - This application can be especially useful if the child spends the first two or three hours of the day overcoming muscle shortening that occurred during sleep. It is recommended to first allow the child to become accustomed to wearing the brace during the day.

Contraindications

- Dislocated hips
- Fixed hip flexion contracture greater than 20°. There are no finite guidelines for use with non-fixed flexion contracture - this generally is dependent on wearer tolerance.
- Adductors so strong they overpower the SWASH® uprights (SWASH® Low Profile has larger diameter and therefore stronger uprights.)
- Adductor length so short it causes discomfort with SWASH® use in the sitting position
- If ambulatory, excessive tibial torsion or foot involvement, without physician assessment of impact SWASH® impacts on these conditions.

Precautions

- In patients with shortening of hamstrings, psoas, adductors, or Achilles Tendon, great care should be taken when planning the orthotic and therapy program.
- SWASH® is not a treatment for hamstring tightness. If current therapy protocols include exercises to relieve hamstring tightness, it is important these exercises be continued as hamstrings will not be stretched in the SWASH®. Hamstring tightness should be monitored on a regular basis. Any signs of increased tightness should be specifically addressed.
- SWASH® does not eliminate the need for AFOs. Particularly for the ambulatory wearer, it is important to re-evaluate the AFO design as the needs may change as a result of the new stance and gait patterns that will result from wearing the SWASH®.
- SWASH® does not replace rehabilitation or the therapist. It does help overcome some of the major consequences of high adductor tone and therefore allows more specific and functional rehabilitation.
- Patients with spinal asymmetry or deformity may be unable to wear the SWASH®, or may require that the orthosis be incorporated into a custom body jacket.
- With time, for some wearers, spasticity of the adductors may reduce either due to wearing the orthosis or Botulinum Toxin A (BTX-A) injections. It is important on a regular basis to review the amount of abduction correction needed to maximize hip alignment and functional goals.

Limitations

- The SWASH® is not a cure-all for all postural problems. New movement and postural motor control patterns will have to be learned and gained. The SWASH® is seen as a device to facilitate these gains.
- If patients cannot walk at all without the SWASH®, it is highly unlikely they will be able to walk with the SWASH®.
- Even with the SWASH® in use, there may be residual internal rotation of the lower extremities. Very often, unless there are internal tibial torsion or metatarsus adductus issues, the medial hamstrings have been seen to exert this internal rotary influence. An aggressive stretching program of the medial hamstrings has been seen to minimize this residual internal rotation.