

Orthotic Management of the Diabetic Foot

For patients with diabetes, it is important to take care of your feet: do not walk barefoot (you may not feel if you step on something sharp), do daily inspections looking for signs of cuts or sores, wear seam free breathable socks, and wear appropriate footwear with a well-fitting custom made orthotic to protect and offload the feet. Most do not realise 70% of diabetes related amputations could have been prevented.



Orthotic treatment is critical to preventing and treating ulcers and charcot deformities that often lead to amputation. Due to the reduced blood flow to the feet, diabetic individuals are at a higher risk for ulcer-type wounds, lower extremity amputation and foot/ankle deformities that are common due to the neurological and circulatory compromise. Risks for skin breakdown are further increased when deformed weight bearing surfaces sustain increased pressures.

When it comes to orthotic management, there are many biomechanical goals the Certified Orthotist, a specialist in foot/ankle orthotic design and fabrication, must achieve in both prevention

and treatment. Prevention of pressure ulcers is the first line of defence for the diabetic patient, and that begins with the correct fitting of diabetic-specific footwear. Generally, these have a sturdy construction with appropriate depth and width at the toe box. A smooth, seamless interior and soft insole round out the key features.

A custom fabricated, total-contact foot orthosis is a sound approach when combined with such diabetic-specific footwear. It is incumbent upon the Certified Orthotist to perform an in-depth biomechanical assessment, gait analysis, and to pay close attention to the foot/foot orthotic interface to ensure that high pressures are avoided and a more equal pressure distribution is achieved. Softer materials are chosen to assist with shock absorption and further modelling of the anatomical contours. Biomechanical alignment is maintained so that mid-foot joints are not deformed under load, thus minimizing risks of charcot deformities and amputation due to ulceration. Together the foot-orthosis-footwear combination is an excellent preventative protocol for any diabetic individual.

Jacklyn Watkinson-Sullivan, CPO (c)

Penticton's Only Full-time Orthotics & Prosthetics Facility



Clinics in Princeton, Oliver & Osoyoos every 3 weeks
Open 5 Days/Week with On-Site Lab (Penticton)
250.490.3636

102-197 Warren Avenue E., Penticton

- Artificial Limbs
- Arm and Leg Orthosis
- Spinal Orthosis
- Sports/Knee Bracing
- Custom Foot Orthotics
- Orthopedic Footwear
- Arthritic/Diabetic Bracing
- Pediatric Bracing

Free Initial Assessments



Jacklyn Watkinson Sullivan CPO (c) | Stuart Watkinson CPO (c)FCBC
 Certified Prosthetist/Orthotist | Certified Prosthetist/Orthotist

www.actionorthotics.ca