

Clinical specialties in orthotics and prosthetics

Foot orthoses to reduce pain, increase function and improve quality of life

Types of foot pain

Foot pain is a common complaint among recreational or high level athletes, as well as everyday people. Foot pain can interfere with regular day-to-day activities and can be associated with acute or chronic conditions. There are many foot pathologies which can affect different parts of the foot.

What treatment options are there?

There are many different treatment options for foot pain. This will vary depending on the severity of the symptoms, previous treatments, cost and individual preference. Interventions may include medications, surgery, stretches, ultrasound, footwear modifications, foot orthoses, or any combination of these.

What are foot orthoses?

An orthosis (pl. orthoses) is an externally applied device that is used to correct body alignment or deformity, minimise discomfort or pain, distribute pressure or assist in rehabilitation. Foot orthoses are specially designed shoe inserts that can be custom-made for the individual from either a scan, a cast or an impression box. Alternatively, foot orthoses can be customised from a pre-fabricated base product and tailored to the individual.

Who provides foot orthoses?

Orthotists (pron. or-tho-tists) are tertiary qualified Allied Health Practitioners who are trained to assess and treat the physical and functional limitations of people using orthoses. Orthotists combine clinical expertise with knowledge of biomechanics, physiology, anatomy and materials science to treat a wide range of foot pathologies.

How can foot orthoses help?

Some foot problems occur due to abnormal foot posture and some are due to the presence of disease, such as rheumatoid arthritis or osteoarthritis. The way the foot orthosis works to help relieve pain will be different according to the underlying abnormality.

Pes planus (flat foot) is a general term used to describe feet with a visually lowered medial (inside) arch which can occur with hindfoot eversion (rolling in). Pes planus can contribute to many lower limb pathologies including plantar fasciitis, Achilles tendinopathy, midfoot/great toe osteoarthritis and tibialis posterior tendinopathy. Since your feet are your foundation, pes planus can also contribute to lower back, knee and hip pain. Foot orthoses support the midfoot and hindfoot to improve foot posture and reduce pain levels.





Orthotists – supporting the Australian community

Pes cavus describes a high-arched foot. People with pes cavus often experience forefoot pain (metatarsalgia/sesamoiditis/ mortons neuroma) due to high loads through the ball of the foot. They also lack shock absorption due to the rigidity of the foot, which can create general lower limb pain. Foot orthoses are used to re-distribute pressure away from the painful forefoot area and provide general cushioning for shock absorption.

Rheumatoid arthritis is an autoimmune disease that results in joint destruction, pain, deformity and functional disability. Altered foot biomechanics as well as deformity (such as claw toes or bunions) may result in areas of increased localized forefoot pressure. Foot orthoses can reduce pain and pressure and increase physical function by distributing pressure away from the painful part of the foot.

Osteoarthritis is a degenerative condition where cartilage on joint surfaces is worn away and joint movement causes pain. Osteoarthritis often affects the first metatarsophalangeal joint (big toe joint) or the mid-foot. Semi-rigid foot orthoses with medial arch support can offload the first metatarsophalangeal joint and reduce arch collapse through the painful midfoot area. The addition of a carbon fibre stiffener, which reduces motion through these joints, may assist with reducing pain levels.



How do I access an orthotist?

If you are experiencing foot pain you may benefit from orthotic management. Ask your GP to refer you to an orthotist. **Certified orthotist/prosthetists** 'cOP-AOPA' can be located using the 'Find a practitioner' search function on the AOPA website (<u>www.aopa.org.au</u>). While you do not need a referral to see an orthotist, some funding bodies such as private health insurers do require a referral. Please check with your insurer to determine if you have cover for foot orthoses and if a referral is required. Most orthotists will also see TAC, workcover and DVA clients.



Orthotic management of foot pathology:

- Foot pain is a common complaint and many causes of foot pain can be treated using foot orthoses
- Foot orthoses are specifically designed shoe inserts that are used to minimise pain by redistributing pressure, correcting alignment or restricting movement
- Orthotists are Allied Health Practitioners who support people with foot pain by providing comprehensive and evidence based orthotic care and interventions



Disclaimer – This fact sheet does not replace clinical advice. If you require orthotic services AOPA recommend speaking to your practitioner. This fact sheet was developed based on interpretation of current evidence as of August 2016. References available on request.