

## Causes

Any sport, activity or work which exposes skin to friction, shearing or abrasion can lead to blisters. The shearing force separates the skin into two layers and the space between fills with fluid (as seen in Figure 1). Blisters are an acute response to high levels of stress on the skin. Have your foot biomechanics checked for anomalies.

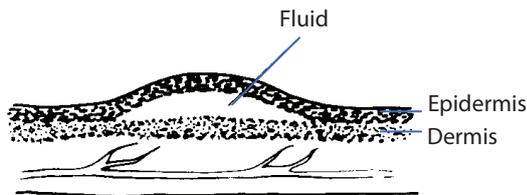


Fig. 1 - Section View of a Blister

## Prevention

- Gradually increase level and intensity of exercise, e.g. by 10% per week.
- Wear appropriate footwear and hosiery or socks.
- **Protect the skin by either:**
  - A thin layer of petroleum jelly.
  - Apply adhesive tape to problem areas.
- Keep skin dry. Moist skin is more susceptible than dry skin. Application of anti-perspirants reduces the risk of serious blister formation.
- New shoes must be worn in before using for extended periods of exercise. Shoes may need adjustment to prevent rubbing.
- Have your foot biomechanics checked as there might be an underlying problem such as a bony protusion.



Fig. 2 - Application of a protective 'donut' padding to the blister



## Treatment

The aim of treatment is to avoid infection and reduce pain and discomfort, prevent the blister increasing in size and improve the rate of recovery.

### For Small Blisters

If the blister is less than 5mm in diameter, leave intact if it is not causing problems and protect with padding (Figure 2) if necessary. These blisters begin to heal within 24 hours.

### For Large Blisters

- Tightly tape with adhesive skin tape such as Hypafix. Tape should stay in place for several days until the skin has a chance to regrow. Otherwise the tape may tear the blister roof and expose the unprotected skin.
- When a blister is larger, it needs to be drained within 12 hours of the blister forming and a pressure dressing applied. The blister can be drained using a sterile needle or by slitting the edge with a scalpel. Your my FootDr Podiatrist should do this for you. The area should be cleaned with isopropyl alcohol and a sterile dressing applied after drainage. The dressing is held in place with adhesive skin tape to apply pressure to prevent the blister refilling with fluid.
- The blister roof should only be removed if infection is present or if the partially removed skin is causing pressure. A dressing such as Duoderm should be used until the skin has healed. Consult your my FootDr Podiatrist about appropriate dressings.
- Diabetic patients should make an appointment with their local my FootDr podiatrist as soon as possible.

*For further information on your foot health or to discuss treatment options with a podiatrist, please contact your local my FootDr podiatry centre.*