

## Total Contact Cast

# What is offloading and how can it help with wound healing?

Offloading refers to the practice of reducing high pressure (weight/force) from a specific area of the body, so as to:

- Protect the feet from excessive pressure
- Prevents further trauma or irritation that could cause the wound to worsen
- Allows the wound area to receive necessary resources for wound healing.



Proper offloading, in combination with appropriate wound care and disease management, can significantly improve the healing outcomes for foot wounds and reduce the risk of complications such as infection or amputation.

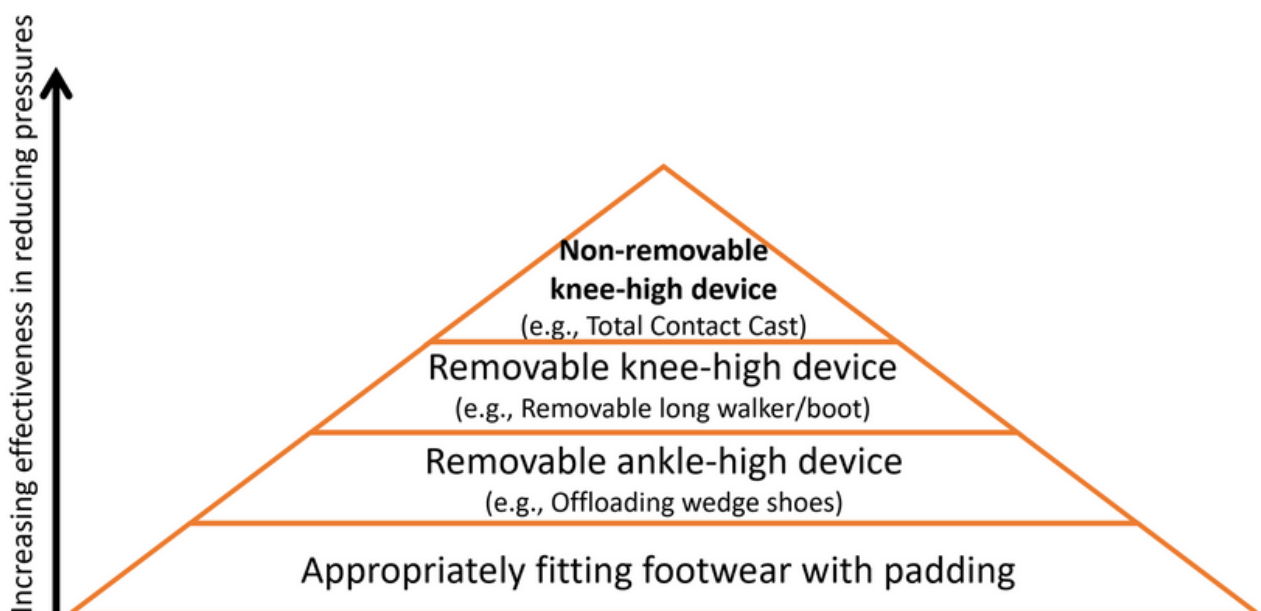


Figure 1. Effectiveness of different offloading interventions to reduce pressure.

## Total Contact Cast (TCC)

- A custom-made, non-removable rigid fiberglass cast that is moulded from below the knee to the tip of the toes.
- To immobilize the affected leg by restricting motion of the foot and ankle joints and redistributes pressure away from the sole of the foot.

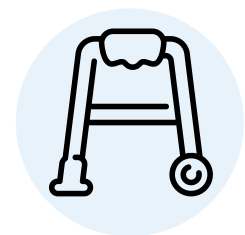


### What to expect from wearing this device?

- Every 1-week review to apply a new TCC until the wound heals or until the Charcot foot has stabilized.
- Need to use a cast shoe to walk safely.
- This device may be slightly heavy and rigid.

### Risks that may occur from using this device:

- Dermatological issues e.g., skin maceration, fungal infection, abrasion, skin irritation and rashes
- Allergy to the casting materials
- New wounds from rubbing / pressure within the cast (pressure sore)
- Increased risk of falls / difficulty walking due to imbalance and instability
- Loss of muscle bulk and strength in affected leg
- Thermal burns during cast removal
- Claustrophobic-like response to the cast



### Things to note when using the offloading device:

- You would need to get used to wearing the offloading device.
- Consider wearing a shoe of similar height (i.e., sports shoe) on the other foot for better balance.
- Consider walking aids to aid in balance and stability with use of the offloading device.
- The device is not waterproof. Always keep the device clean and dry. Wet devices may lead to further injuries/ulcerations.
- If the device is causing any problem / pain or discomfort, stop using the device and call to schedule an earlier Podiatry appointment.

## When wearing TCC, look out for:

- New pain
- Feeling persistent pressure caused by the cast
- Numbness and tingling in the toes or feet
- Fever or chills
- Leg feels excessively warm and tight within the cast
- Strong odour or smell
- Foot feels wet and/or fluid is coming out of cast
- Cast feels very loose
- Cast is broken / cracked
- Outbreak of rashes around the affected leg
- Severe itchiness
- Claustrophobic-like response to the cast



Contact the WH Contact Centre during office hours (Mondays to Fridays, 8AM to 5PM) if you encounter any problems. Inform that you have a Total Contact Cast applied by Podiatry and there is a problem.

If you require immediate attention outside office hours, go to the Emergency Department for cast removal and inspection of the affected leg. Bring along the letter provided so that the doctors in the Emergency Department will be aware of your situation.

Contributed by Podiatry

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