

# Orthotics factsheet

Orthotists are autonomous registered practitioners who provide gait analysis and engineering solutions to patients with problems of the neuro, muscular and skeletal systems.

Their qualifications make them competent to design and provide orthoses that modify the structural or functional characteristics of the patient's neuro-muscular and skeletal systems enabling patients to mobilise, eliminate gait deviations, reduce falls, reduce pain, prevent and facilitate healing of ulcers.

Spinal orthoses range from fabric corsets to scoliosis bracing to spinal trauma bracing.

At Manchester Centre for Clinical Neurosciences (MCCN), we specialise in trauma bracing.

The type and size of the brace depends on whereabouts in the spinal column the injury is.

We hold a stock of modular parts of the braces we use, so we can ensure the brace fits as closely as possible, as quickly as possible.

Some patients may require fully custom-made braces.

Your Orthotist will have considered your body shaping, body sizing, skin condition and skin integrity prior to choosing and fitting your spinal orthosis.

Once fitted with a spinal brace, whether it be a collar or one that encompasses your torso, you will notice the outer shell is a firm to semi-flexible structure.

This is imperative to minimise any large movements of the spine to enable healing.

This shell will usually be lined with cushioning foam to prevent any discomfort and skin breakdown.

It is important this liner is kept clean and in good working condition. If you require a spare foam liner or a replacement, do not hesitate to contact our department so we can provide you with this.

If you feel the brace is causing skin breakdown, it is extremely important you contact our department immediately to have this resolved as soon as possible.

It is important to note the following and contact our department if you have any concerns about the fit of your brace:

- Whilst your spinal brace may not be very comfortable, it should not be painful.
- You should not be able to move the area of your damaged spine to any great extent (e.g. if you can nod or shake your head with a collar on, it is not fitted properly).
- You may notice areas of redness on your skin where the brace has been, but this should not be to the point of causing bruising or skin breakdown.
- You must adhere to any wear instructions you have been given by your Consultant, Nurse, Physiotherapist or Orthotist.

This should include when you wear the brace and how you apply the brace (in sitting/lying).

Below are a number of videos demonstrating how commonly used braces and collars should be fitted, in both sitting and lying down.

**Thoracic  
Lumbar  
Sacral  
Orthosis  
Fitting**

**Cervical  
Thoracic  
Orthosis  
Fitting**

**Cervical  
Thoracic  
Lumbar  
Sacral  
Orthosis  
Fitting**

**Cervical  
Collar  
Fitting**

**Fitting a  
Hyperexten-  
sion  
Brace**

**Exercises  
With Knee  
Rolls**