North Cheshire and Mersey
NHS Foundation Trust

Cervical thoracic orthosis (CTO) brace

Orthotics

Information for patients and carers

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Caring for you

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Introduction



A CTO brace is a fixed medical brace that keeps the neck and upper back still. It is used to treat fractures, stabilise the spine after surgery, or manage severe neck injuries. The brace helps reduce the risk of further injury by limiting bending forwards or backwards when worn out of bed, sitting in a chair, standing or walking.

This brace should be worn as advised by the Walton Centre or your hospital consultant.

Please note: The brace will already be set up and adjusted for you by the Orthotics Team.

Guidance for carers on fitting the brace

For hygiene and comfort, we recommend the patient wears a vest or t-shirt under the brace.

Please note before you start:

a) The patient must be **lying flat** on the bed when you start fitting the brace.

b) For the 4post (brace mode with a rear bar and waist band), the patient should be rolled to the side the patient finds most comfortable, as directed by the consultant.

1. Roll patient onto their side (check patient notes prior to rolling to see if ‘log roll‘ is needed).

2. Place the back panel of the brace in the middle of the patient’s back. The Velcro® straps on the collar’s back panel should lie half-way between the bottom of the patient’s ear and the shoulder. This ensures the brace is in the correct position. Compress the bed and gently slide the belt under the patient.

3. Roll the patient back so that they are lying on the back panel. The Velcro® straps on the collar should be the same length, which indicates that the brace is lying centrally on the patient.

4. Offer the front panel up to the patient ensuring the dial, on the collar, is in line with the sternal notch (visible dip in the neck). Close the collar using the hook and loop straps on the back panel.

5. The chest piece on the front panel should be in line with the bottom of the patient’s ribcage.

How to remove the brace

To remove the brace, please follow the steps below.

Please note: This should be done with the patient lying on their back.

a) Open the collar using the hook and loop straps on the back panel.

b) Pull back the front panel.

c) Unhook all the Velcro straps.

d) Compress the bed and gently slide the belt out from under the patient.

Pressure management

The patient should be checked for pressure areas every time the brace is put on and taken off. All areas where the brace touches the patient have potential to cause areas of high pressure.

Check all contact points for pressure each time the brace is put on or taken off. Pay particular attention to bony areas, wounds, and skin conditions, as these are more likely to be areas of pressure.

If you are an inpatient, any pressure areas found should be discussed with the ward manager. If you are at home, please contact the Orthotics Team.

Please note: The brace should **not** be worn during sleep unless stated in the patient notes or advised by the consultant. If the patient is in the brace for long periods, it is recommended to remove it and check for pressure areas after 4 to 6 hours. This should be done following the instructions above and with the patient lying flat.

Care instructions

The liner and straps may be washed with mild detergent and left to air-dry.

Further information

If you have any concerns regarding the length of time you are to use the brace or when to expect a follow up from your spinal team, please contact The Walton Centre:

Spinal nurses – 0151 529 8853

This is an answering machine. Please leave your name and phone number. Every effort is made to respond daily, but work commitments may occasionally delay replies.

Physiotherapist – 0151 529 5451

Secretary to your consultant: 0151 5253611 and ask for your consultant's secretary.

If you have any questions or concerns with the fitting of the brace, please contact the Orthotics Team on 01925 662446 (available Monday to Friday, 8am to 4pm).