CTL SO (Cervical Thoracic Lumbar Sacral Orthosis)

A CTLSO is a two-piece clamshell design. It is used to stabilize the head and neck as well as the spine after surgery or in the event of a spinal fracture to promote healing and decrease pain.

**Application**

1) Apply a snug fitting cotton t-shirt or body sock. Loose shirts may cause wrinkles and skin irritation.
2) While laying down in bed, log roll to the side to allow caregiver to assist in putting on CTLSO.
3) Caregiver should place the back portion on the patient, matching the grooves in waist of trunk portion of CTLSO with patient’s waist. (The soft area between the hips and ribs.)
4) Patient should gently roll onto back. Caregiver should confirm that CTLSO has not moved and is still in proper position. Adjust accordingly.
5) Place the front portion on patient, with the sides overlapping the back portion.
6) Fasten the middle straps on the trunk portion first. Pull straps at the same time to ensure even tightening and prevent twisting of the brace. Straps should be snug to hold CTLSO in place, however allow normal breathing.
7) Fasten top and bottom straps in same manner.
8) Affix the chin strap on the head piece, ensuring that straps are tight and providing motion control. If there is a forehead strap, fasten last.

**Wearing Schedule**

Always check with prescribing doctor for precise wearing schedule. Many times the CTLSO is worn only when out of bed while sitting or standing. Other times, the doctor requires the CTLSO to be worn at all times.

**Cleaning and Maintenance**

Rubbing alcohol may be used to clean the inside and outside of the CTLSO. Spray CTLSO with alcohol and wipe gently with a cloth. Be sure that CTLSO is completely dry prior to application to ensure no skin issues will occur. The pads on the head/neck portion may be hand washed with mild detergent and laid flat to dry.

**Tips and Problem Solving**

- Avoid soft chairs and sit up straight. Leaning back into a chair will cause the brace to migrate upward and may place pressure under arms.
- Do not lean forward over a table while eating. Bring the food up to the mouth. This will reduce any pressure on thighs and chest.
- If the CTLSO starts to migrate upward under throat/armpits, ensure that straps are snug. Straps that are loose will allow brace to shift.

If you experience any problems, please contact your Orthotist.