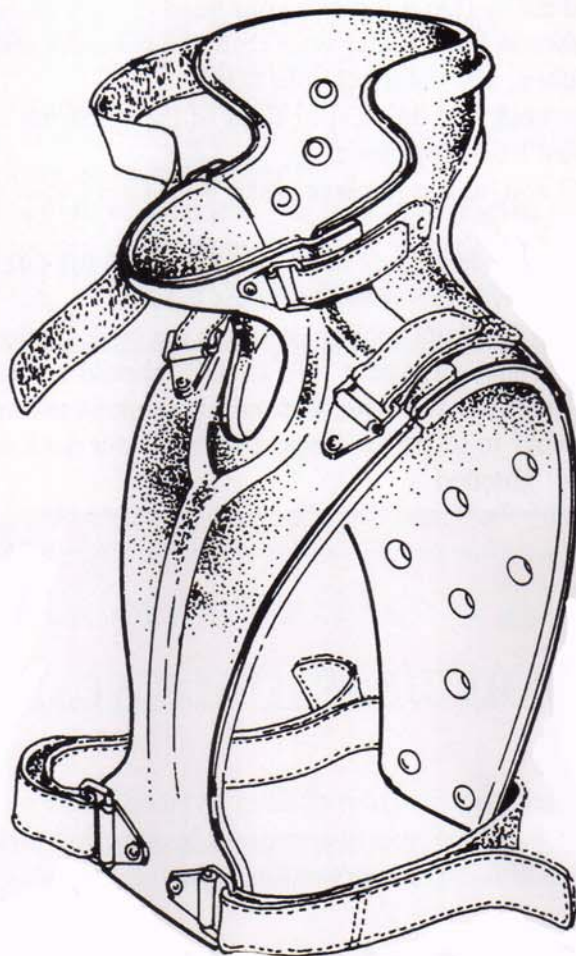




Ballert

ORTHOPEDIC OF CHICAGO



CERVICAL THORACIC ORTHOSIS (CTO) INSTRUCTION SHEET

PURPOSE

The Cervical Thoracic Orthosis (CTO) is designed to support the cervical portion of the spine from C1 through C7. By design the CTO limits the motion of the cervical spine and skull by inhibiting rotational movement and both cervical and capital flexion and extension. It is important that the CTO be worn until cervical spinal fusion is accomplished. Your doctor will provide a date when your brace can be removed.

You must carefully follow the instructions for the use of the brace. Before you are discharged from the hospital, the nurse will review the use of the brace with you and a family member. Please feel free to ask questions. It is important that you understand how to use your CTO brace.

PUTTING YOUR CTO ON

You should always have a helper or caregiver available to assist you in taking your CTO off or putting it on.

1. Someone should always help you put your CTO on.
2. It is best to put your CTO on while in a sitting position
3. Leaving your temporary cervical collar in place, your helper should pull a stockinet over your head and below ear level
4. Remove your temporary cervical collar (Do not move your head or neck at this point)
5. Before continuing, your helper should swab under your chin and the sides and back of your neck with 70% rubbing alcohol. This will dry, toughen, and disinfect your skin.
6. Gently pull the stockinet over the neck and drape split sides of the stockinet over the chest and back
7. The top of stockinet should be just below eye level
8. Apply the front part of your CTO and hold it in place under your chin (your CTO is labeled to show "FRONT" and "BACK" portions)
9. Your helper should apply the posterior section of the CTO and attach the lateral neck straps loosely
10. Your helper should then attach the over-the-shoulder straps loosely
11. Your helper should make sure that the front section overlaps the back section, then gently tighten straps
12. The label on each side of the front section saying "OUTSIDE" should be visible
13. The straps should be tightened, one side at a time, in small increments taking care not to pinch your neck
14. It may be necessary for your helper to insert his finger between your neck and closure to prevent pinching
15. The chest straps are then evenly tightened
16. Take care that the same amount of chest strap is pulled through the buckle on each side
17. Pull the front of the stockinet down over the chin piece of CTO to form a cover

DAILY CARE AND HYGIENE WHILE WEARING YOUR CTO

It is important that you strictly adhere to a program of daily hygiene while wearing your CTO. A program of hygiene will help prevent pressure sores that can ulcerate and become infected. Proper hygiene requires the removal of your CTO. The removal and hygiene procedure is as follows:

1. Start in a sitting position in a hard chair
2. Have a helper remove your CTO by unstrapping chest, then shoulder, then neck straps
3. You should hold the front section of the CTO in place while your helper removes the straps
4. Hold your head steady
5. Your helper then removes your stockinet by gently pulling it up over your head
6. Ask your helper to check your skin for redness that will not go away in 5 to 10 minutes
7. Your helper should swab your chin, the back and sides of your neck with a 70% alcohol solution
8. Apply your temporary extrication collar
9. If your CTO is very dirty it should be washed inside with soap and water
10. Swab the inside of your CTO with 70% alcohol, especially around neck and jaw
11. Your helper then pulls a new length of stockinet over your head as explained in the section about "Putting Your CTO On" above
12. Apply CTO as above (steps #7 to #17)

SPECIAL INSTRUCTIONS TO HELPERS OR CAREGIVERS

1. Do not use powders or lotions, since they soften skin and can cause skin breakdown
2. Use alcohol only, it will toughen the skin
3. If skin is red or ulcerated, call the orthotist, to pad around the ulcer
4. You may use triple antibiotic dressing or anti-decubitus dressings
5. Change the Velfoam mandible piece, at least, every other day
7. Patients who need moderate to maximum assistance will need continuous monitoring of CTO position on their shoulders, to ensure proper fit
7. A Patient with a weak trunk will have a tendency to slide in a hospital bed if it is inclined. Knees should be elevated to hold the patient in the proper position. In bed, raise knees when raising back
8. Whenever the patient is moved please check the position of the CTO posterior section so that it stays snug on the shoulders.

PREVENTION OF SKIN PROBLEMS

Check the skin surfaces under your CTO, particularly where you have bony protuberances, for red or irritated spots each day. Skin irritations can result from moisture or bacteria on the skin or from a CTO that is not properly positioned.

Protecting your skin: Always wear a clean, dry, well-fitting, 100% cotton stockinet under your CTO. Avoid wrinkles in the fabric.

Bathing: Ask your physician for bathing instructions and precautions. Remember to thoroughly dry your skin and the inside of your CTO before putting it back on or skin irritation may result.

Skin Products: Alcohol wipes can reduce the moisture and bacteria on skin surfaces under the CTO. Some skin powders may be beneficial, however take care not to use too much powder which might lead to caking and additional irritation under the CTO.

Chaffing and Pressure Spots: These may result from wearing your CTO either too loose or too tight. Always check the position and tightness of your CTO.

Rash: If the CTO causes a rash or skin irritation try to change your stockinet more often. The irritation may be caused by perspiration, heat, laundry detergent, or fabric softeners.

WHEN TO CALL THE DOCTOR

Please notify your doctor immediately if you experience the onset or worsening of the following symptoms:

- * Numbness or Tingling
- * Weakness of your arms or legs
- * Pain
- * Incisional drainage

IF YOU ARE EXPERIENCING ANY OTHER PROBLEMS OR DISCOMFORT FROM YOUR USE OF YOUR CTO PLEASE CONTACT YOUR BALLERT PRACTITIONER _____ AT (773) 878-2445

ABOUT BALLERT

Ballert is an ABC certified facility. ABC certification means that Ballert meets all of the professional and quality standards set by the American Board for Certification in Orthotics and Prosthetics, Inc. These standards provide you with the finest orthotic and prosthetic devices. Whether your doctor prescribed an off the shelf or custom designed and manufactured device you are assured that Ballert will stand behind its products and will work with you and your doctor to assure the proper balance between function and comfort.