OrthoPro™ ROM Elbow Orthosis

TREATMENT RATIONALE:

Facilitate maintenance or rehabilitation of the elbow in treatment of joint stiffness or non-fixed adaptive tissue shortening contractures of the elbow joint. The orthosis ROM hinge can be set in 15° steps to control both flexion and extension motion in the brace. Ideal for providing protected ROM exercise in the brace post surgically or to limit motion to prevent further injury of the joint during rehabilitation. The OrthoPro™ ROM Elbow can also be used at a static setting to protect and support the joint or to provide progressive extension orthotic therapy.

FUNCTIONAL OBJECTIVES:

Maintain or increase elbow Range of Motion, allowing for increased functional use of the affected joint. Functional use of the elbow can be significantly improved by increasing ROM, allowing for greater independence in ADL's. If function is not restored or significantly limited,

the device should be used to maintain ROM as needed.

ORTHOTIC TREATMENT:

- 1. Use PROM to passively stretch the affected joint capsule(s), connective tissue, tendons, and muscles.
- 2. Slowly and gently stretch the elbow to the point of noticeable resistance only (no discomfort). Hold for a minute to allow the extension release of the affected joint.
- 3. Set the elbow orthotic hinges to provide the desired orthotic therapy. Follow the instructions for the ROM hinge setting. For a <u>progressive extension</u> orthotic therapy setting, add approximately 15° of extension to the comfortable end range for the flexion stop hinge setting. When the device is applied, a gentle stretch will be applied to the affected joint.
- 4. Open the upper and bottom cuff flaps. The device label is always placed on the top cuff for ease in device orientation.
- 5. Holding the elbow at its furthest point of extension, place the orthotic on the arm with the hinge at the midline of the elbow joint.
- 6. Secure the top cuff flap over the back of the bicep.
- 7. Secure the bottom cuff flap over the back of the forearm.
- 8. Place the elbow cap directly over the elbow.
- 9. Bring the elbow cap straps up between the side bars, Throught the D-rings and secure the hook end of the straps to the loop strip.
- 10. Incrementally tighten all four elbow cap straps to slowly bring the elbow into a stretched (extended) position. The elbow joint should come up into the brace as the elbow cap is secured.
- 11. Palpate the biceps tendon in the crease of the elbow. It may be taut upon initial brace application. Repalpate after several minutes. There should be a noticeable softening of the tissue after several minutes of wear.
- 12. Check all cuff flaps and the elbow cap for pressure. Two fingers should be able to be inserted between the flap and the skin. Loosen flaps if necessary.
- 13. Determine wearing schedule per therapy evaluation and physician's order.
- 14. Incrementally increase wearing time per patient tolerance and patient care plan up to a maximum of six hours on per shift. A minimum of three to four hours of wear daily after the adaptation period is recommended for best results.

- 15. Release and check for skin redness or pressure or patient discomfort every two to three hours at a minimum. Remove the orthotic device immediately if significant redness or pressure is evident. Notify the appropriate staff member(s) immediately and document any significant redness or signs of adverse pressure or shear. Discontinue device use until the skin integrity issues are resolved, and the device is modified or the wearing schedule is altered to eliminate potential skin integrity problems.
- 16. Follow manufacturer's instructions for care of the orthotic device. Always inspect the device between applications to ensure the soft goods are properly in place, the device settings have not been altered, and the device has not been soiled or would not provide any other risk to the patient prior to application.
- 17. Check device settings for continued application of the desired amount of extension at least once a month. Re-adjust the hinges to maintain 5 to 10° of extension beyond the point of resistance to stretch as needed for progressive extension orthotic therapy.

LAUNDRY INSTRUCTIONS:

NOTE: Refer to facility regulations for infection control.

ORTHOPRO ROM ELBOW ORTHOSIS

- Remove uprights.
- Remove gel pads from upper and lower cuff pockets.
- Fasten all hook and loop attachments on soft cover and place in a laundry bag.
- Hand or machine wash, gentle cycle with mild detergent. DO NOT USE COMMERCIAL WASHERS OR HOT WATER.
- No bleach or fabric softener.
- Air dry.

UPRIGHTS

- Clean with mild detergent or alcohol.
- Rinse with clean water.
- Dry with soft cloth.

WARNING: The product requires a physician's order. The product is designed for single patient use only in order to avoid cross contamination. Any substitution or removal of the product's parts voids the manufacturer's warranty. OCSI/NeuroFlex, Inc. will assume no liability if the above instructions are not followed.