

OCSI STATIC AIR KNEE

TREATMENT RATIONALE:

Facilitate rehabilitation of the knee in treatment of non-fixed contractures of the knee joint.

FUNCTIONAL OBJECTIVES:

Increase knee Range of Motion to full extension, allowing for increased function and use of the affected joint. Functional use of the knee can be significantly improved by increasing the functional ROM, allowing for greater independence in ADL's such as weight bearing, wheel chair mobility, and potential ambulation. If function is not restored or significantly limited, the device should be used to maintain full 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 knee 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 knee orthotic hinges to provide 5° to 10° of additional extension (extension setting) beyond the point of resistance to stretch.
4. Open the upper and bottom cuff flaps. The device label is always placed on the top cuff for ease in device orientation.
5. Place the orthotic on the leg with the hinge at the midline of the knee joint.
6. Secure the top cuff flap over the upper thigh.
7. Secure the bottom cuff flap over the shin.
8. Holding the knee at its furthest point of extension, slowly inflate the air bladders, first one side than the other, to hold the leg in desired degree of extension (the greater the degree of extension, the more inflation needed). **NOTE:** Therapy should begin by using the two air bladders (lateral and medial provided) If greater extension is desired, an additional third (posterior) air bladder can be added (ordered separately - AP 4035 Max Air Accessory Kit) **(SEE ATTACHMENT OF ADDITIONAL AIR BLADDER).**
9. Place the kneecap directly over the middle of the patella (centered). Bring each of four straps on the kneecap thru the corresponding "D" ring on the orthosis and loosely secure the knee cap. Incrementally tighten all four knee cap straps towards the center of the knee cap to slowly bring the knee into a stretched (extended) position. ***When properly fitted, the knee cap straps will form an "X" over the center of the knee cap.*** The "X" orientation of the knee cap straps is important to equally distribute the knee cap pressure across the entire knee cap.
10. Check all cuff flaps and the kneecap for pressure. Two fingers should be able to be inserted between the flap and the skin. Loosen flaps if necessary.
11. Secure large black straps
12. Determine wearing schedule per therapy evaluation and physician's order.
13. 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.
14. 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.
15. 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. (cont.)
16. 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.

ATTACHMENT OF ADDITIONAL AIR BLADDER – MAX AIR ACCESSORY KIT (AP 4035)

1. When both medial and lateral air bladders are at full inflation and greater extension is desired, the additional third (posterior) air bladder may be added.
2. Remove orthosis from resident before attaching additional air bladder pocket.
3. With orthosis open, lay on flat surface with black straps facing up.
4. Center bladder pocket over diamond shaped opening of orthosis with the open end of pocket facing the bottom of the orthosis. **NOTE: Bladder should always be on top of the plastic inside the pocket before placing pocket on orthosis.**
5. Secure small straps on bladder pockets thru corresponding “D” rings on black straps of orthosis.
6. Reapply orthosis to resident.
7. Holding the knee at its furthest point of extension, slowly inflate the posterior bladder to hold the leg in desired degree of extension (the greater the degree of extension, the more inflation needed).

LAUNDRY INSTRUCTIONS

NOTE: Refer to facility regulations for infection control.

KNEE 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.

AIR BLADDERS

- Clean with mild detergent
- Rinse with clean water
- Dry with soft cloth

UPRIGHTS

- Clean with mild detergent
- 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, Inc. will assume no liability if the above instructions are not followed.

OCSI

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