

## Bucks Positioning for U/E's



### Description of positioning device:

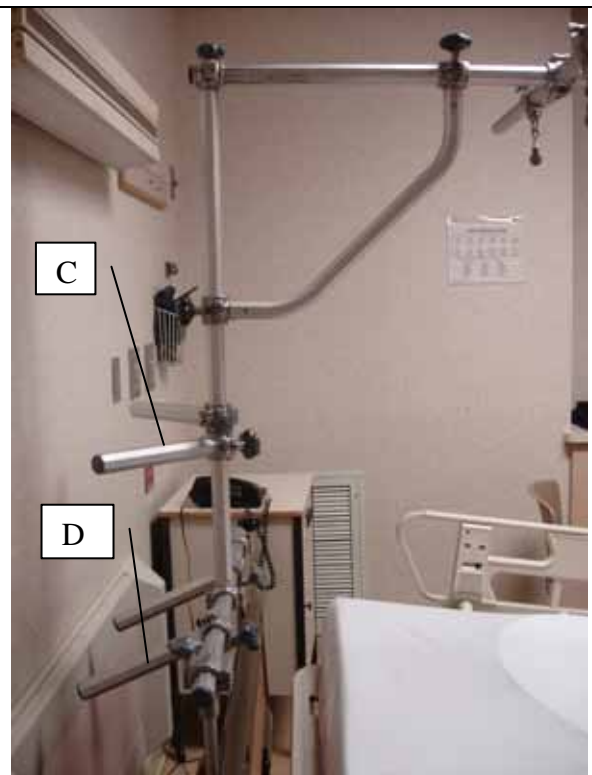
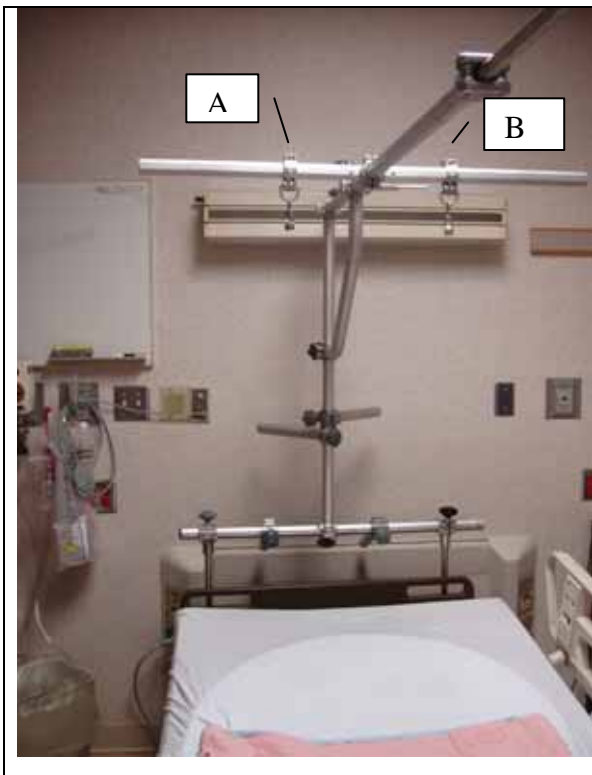
A method of elevating the U/E and positioning the shoulder at 90 degrees of flexion, abduction or scaption. The purpose is to maintain ROM between periods of exercise and to reduce edema.

### Materials used/needed:

- \* Bed traction bars and pulleys
- \* Rope
- \* 1#-2# weights and weight pan
- \* Buck's traction boot
- \* Cotton batting (optional)
- \* Scissors

### Fabrication Instructions:

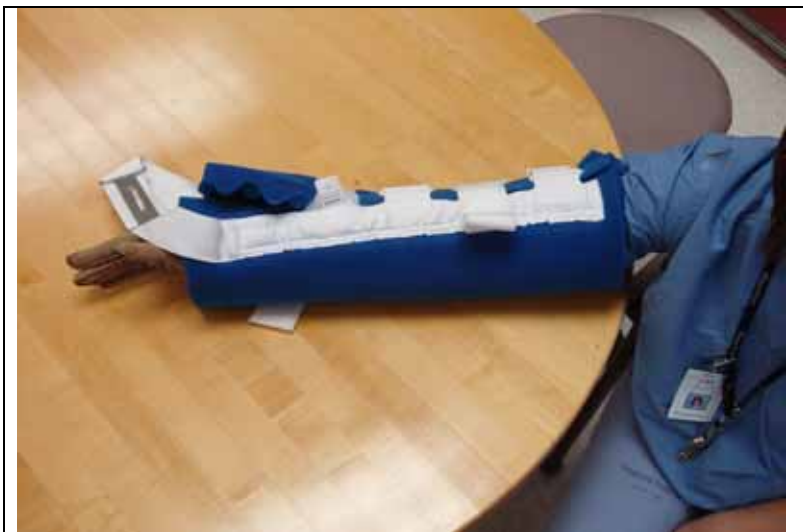
1. Set up the bed for overhead traction.
2. Connect a shorter traction bar on the overhead bar at the level of the patient's shoulders. This shorter bar can extend from one or from both sides of the overhead bar, depending on which extremities will be positioned.
3. Add a pulley or pulleys to the bar (A and B on picture).
4. Connect a 2<sup>nd</sup> short bar or set of bars to the upright traction bar at the head of the bed. These will allow the weights to clear the bed so they do not become entangled and restrict the patient's motion. One or two sets of these short bars can be used. Patients should be able to move their arm while wearing this device.
5. Add a pulley to each of these bars at the head of the bed (C and D indicate where the pulleys should be placed on each of the bars to direct the weights away from the bed).



6. Order appropriate size of Buck's traction boot to fit patient's arm. (A Buck's traction boot is a foam, 'boot' shaped device which is designed to be used for traction to the L/E for orthopedic patients e.g. hip fracture.)
7. Cut the bottom of the 'boot' section out to create a cylindrical sleeve with an opening for the hand at the 'boot' end. Try to preserve as much length as possible.



8. Wrap the Buck's sleeve around the patient's arm, placing metal 'stay' over volar aspect of arm to prevent elbow flexion. You can use cotton batting over the patient's arm for protection of fragile skin. For children's arms, cotton batting is sometimes necessary to increase the circumference of the arm in order for the sleeve to fit. The sleeve should support the wrist so the hand is not hanging over the edge of the sleeve.



9. Attach rope to top of Buck's traction sleeve. Thread rope through pulleys above shoulder and then behind bed.
10. Make loop at end of rope to attach weight pan. Add enough weights so that arm can be suspended when the patient is relaxed, but still allow patient to move arm for comfort. This is usually 2-4#. Make sure that the weight pan can move up and down freely without touching bed.



**Advantages:**

An excellent way to position shoulders in 90 degrees of flexion/scaption. Most patients will tolerate this. Elbow is positioned in extension in conjunction with the shoulder positioning. Soft foam sleeves do not cause pressure. Device is easy for nursing staff to don correctly.

**Disadvantages:**

Does not work well in conjunction with resting hand splints. Patient may have a feeling of being confined. Patient can change their position in bed to alter the position of their shoulder, thereby decreasing effectiveness.

**Indications:**

For patients with edema to hands and U/E's. Works well with bulky wrap to U/E's to decrease edema. Also can be used for positioning of shoulder to maintain patient's ROM when not exercising (at night or rest periods). We also have a PVC model which patients can use at home when they sleep.

**Precautions/Contraindications:**

Do not position in greater than 90 degrees of shoulder flexion/scaption to prevent brachial plexus injuries. We do, however, use the device for stretching at greater than 90 degrees for short periods of time. When a patient wears a resting hand splint while in the Bucks sleeve, the splint can migrate distally and potentially cause a pressure sore at the base of the thumb. Do not use over new or fragile grafts as sleeve could cause shearing.



**Can use for short periods of time for a shoulder stretch.**

**Level of Therapist Skill/Specialization:**  
**Beginning to intermediate therapists.**

**Total time required to fabricate device:**  
**30 minutes**

**Primary Reference:**  
**None**

**Supporting References:**  
**None**

Buck's Boot can be ordered from Bird & Cronin Inc.  
1-800-328-1095  
Sizes XX-small (12" in length) through X-large (21" in length)  
#0814 470 through 475

Contact me if you have any further questions:  
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