

## Parent/Caretaker Post-Op Instructions

### Nerve

Is there numbness, tingling or pain in the elbow, hand, wrist and /or fingers?  
Call Dr. Nath (866) 675-2200 ASAP.

### Circulation

Check nail beds for two days post surgery (should be pink). Press nail bed until turns white and release, should return normal pink color within 2 seconds. If not, call Dr. Nath (866) 675-2200.

### Incision

Check for signs of infection—discharge of any kind, redness, warmth, smell. Keep clean and dry. See your family physician for an incision check one week following surgery. Steri-strips usually fall off by themselves in 2-4 weeks when the incision has closed. If they haven't fallen off by themselves (and you know that the incision is closed), you can just wash them off gently with soapy water.

### Bathing

The incision cannot get wet until it is fully closed. If patient has a daytime splint, the splint can be removed for bathing but the arm must be held in the upright position.

### Splint

If the splint loses integrity, if it weakens or breaks and the position of the arm changes, bring to therapist, orthotist or hospital clinic to repair. If the patient has to wear the splint during the day, de-splint at the prescribed number of days or weeks, slowly and carefully. The least painful method is to remove the splint, get into a warm bath, and lower the arm in the bath water or have the patient lay flat, remove the splint and apply some warm compresses. You may want to administer some Tylenol an hour before de-splinting the first time. Let the patient determine the length of time with the splint off for the first couple of days. Gradually increase time out of the splint as tolerance increases.

### Follow-Up

- (a) video three months post-op followed by a video at one-year post op
- (b) evaluation by therapist every three months for two years post-op (using our PDF evaluation form)

## GENERAL GUIDELINES

Passive range of motion (PROM) begins when the patient no longer has to wear the splint during the day. All PROM is done slowly until resistance is felt. When resistance is felt, decrease range slightly and hold for 30 seconds. Repeat with each stretch 3x. Entire sequence should be done a minimum of 2x per day.

**Elbow flexion/extension**  
**Wrist flexion/extension**  
**Finger flexion/extension**

**Forearm pronation/supination**  
**Wrist abduction/adduction**  
**Finger abduction/adduction**

### SHOULDER ABDUCTION

**Position of Child:** seated on lap facing out or in comfortable chair.

**Stability:** Adult places one hand over the lateral border of the scapula. Hold firmly to prevent the scapula from sliding laterally.

**Motion:** With one hand on elbow, bring arm out to side as far as possible and then up above the head.

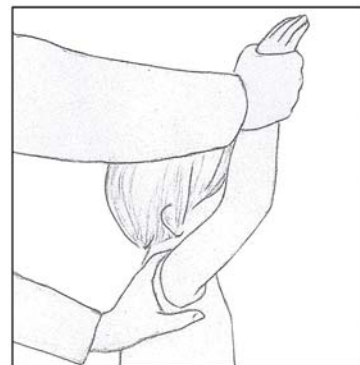


### SHOULDER FLEXION

**Position of Child:** seated on lap facing out or in comfortable chair.

**Stability:** Adult places one hand over the lateral border of the scapula. Hold firmly to prevent scapula from sliding laterally.

**Motion:** With other hand down by the forearm/wrist, lift arm up above head.

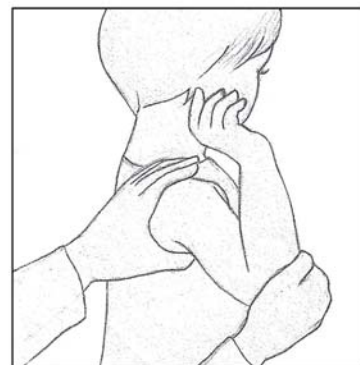


### SHOULDER EXTERNAL ROTATION

**Position of Child:** seated on lap facing out or in comfortable chair with arm abducted to 90 degrees with elbow flexed to 90 degrees.

**Stability:** Adult places one hand over the lateral border of the scapula. Hold firmly to prevent scapula from sliding laterally.

**Motion:** With other hand supporting arm at elbow, rotate arm posteriorly (into external rotation).



## Weeks 2-8

Continue passive range of motion exercises outlined in the previous section. Begin adding facilitation of active usage of upper extremity. All resistance needs to be eliminated with the exception of gravity. Do not encourage any internal rotation or adduction of the shoulder. If child spontaneously attempts to complete activity using shoulder adductors or internal rotators such as crossing the midline, please adapt activity.

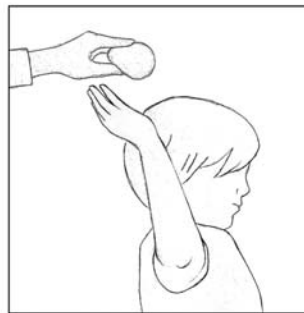
All activities are to be done with therapist/parent stabilizing the trunk and scapula. All compensatory movements to be discouraged such as hiking the hip, rotating or bending the body backwards or sideways, or hiking the shoulder. Only encourage correct movement patterns even if the child is able to get better range/function using compensatory patterns.

### GOOD



**Shoulder Forward Flexion**

reaching overhead  
in a forward position



**External Rotation**

reaching backward behind  
ear, reaching for objects to  
the side and behind



**Shoulder Abduction**

reaching up and out  
to the side

### BAD



using the trunk to lift the arm



body bent backwards

## Weeks 8+

It is imperative that a **full assessment of the scapular stabilizers on both sides as well as upper extremity function** be done before an active program is initiated.

**Assessment of scapular stability** should consist of muscle grading of all upper trunk and shoulder musculature both in terms of range of motion as well as strength.

**Assessment of sensibility** of upper trunk, shoulder, and extremity should also be done.

**Please be extremely careful** when assessing shoulder internal rotators and adductors as they have been surgically released.

Treatment must focus initially on **strengthening of the scapular stabilizers** prior to upper extremity training, in order to allow for adequate scapulohumeral rhythm.

Please consider the use of TheraTogs (theratogs.com), kinesiotaping and specialized braces, etc. to build and maintain scapular stability. TES (nighttime electrical stimulation) as well as sEMG with Stimulation (tascnetwork.net) are modalities which have been shown to be effective when used in coordination with traditional treatment techniques.

## Follow-Up

- (a) video three months post-op followed by a video at one-year post op
- (b) evaluation by therapist every three months for two years post-op (use our PDF input form)

## Evaluation Form

Please use our special "input-able" PDF evaluation form found on Dr. Nath's website [www.drnathbrachialplexus.com](http://www.drnathbrachialplexus.com) in the Mod Quad surgery section or attached to this packet, if this packet was emailed to you. Return the form to [contact@drnathmedical.com](mailto:contact@drnathmedical.com). Please update your system with the latest version of Adobe Reader in order to view and use this form correctly. [www.adobe.com](http://www.adobe.com)

## Therapy Questions

For therapy questions contact Cindy Servello, OT at [cindy1otr@aol.com](mailto:cindy1otr@aol.com).