

Home Stretching Program

Brachial Plexus Injury

What: Passive stretches for all upper extremity joints of affected arm.

Why: To prevent joint contractures, loss of motion and muscle tightness which can result in abnormal postures and movement patterns, as well as limit arm use.

When: Twice daily, with the exception of the external rotation stretches. Refer to this stretch for details. Therapist will guide which stretches/joints should be performed more frequently.

Shoulder Adduction (*bring arm close to body*)

Position: Child will be seated. Move arm out to the side and HOLD shoulder blade in that position.

Action: Bring the arm down against the trunk (don't let it move) pushing the arm toward the shoulder blade.*

**Keep the shoulder blade from moving inward toward the spine.*



Shoulder Abduction (*raise arm over head*)

Position: Perform stretch in any one of these positions. Child may be on his/her back, lying on unaffected side, sitting or on his/her belly.

Action: Stretch arm overhead, one hand on upper arm and the other on the shoulder blade.*

**Keep the shoulder blade stable; prevent it from moving out to the side before the joint reaches 90 degrees.*

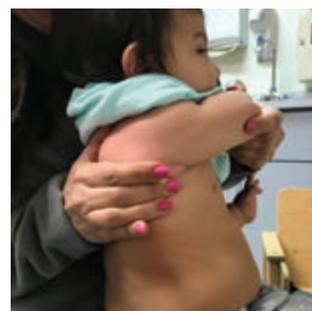


Horizontal Adduction (*cross body stretches*)

Position: Sit child on your lap with your chest against his/her unaffected side.

Action: Bring the arm across the body toward the unaffected arm.*

**Keep the shoulder blade from sliding outwards.*



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Shoulder Flexion

Position: Baby is on his/her back and affected arm is by child's side.

Action: Stabilize shoulder blade with one hand and gradually raise the arm straight up in front of the body and over the top of the head by supporting the arm at the elbow. Hold for a stretch for 5-10 seconds at the point where resistance is felt or just below the point where baby exhibits any pain behaviors.



External and Internal Rotation Stretches from 90/90 Position

Position: Place child on his/her back with towel folded under shoulder.

Action: Stabilize shoulder blade with one hand. Keep elbow bent at a 90-degree angle, while moving hand back against surface. Hold for 5-second stretch and then move hand down towards child's feet.*

**Stop moving arm when you feel shoulder popping up beneath your hand.*

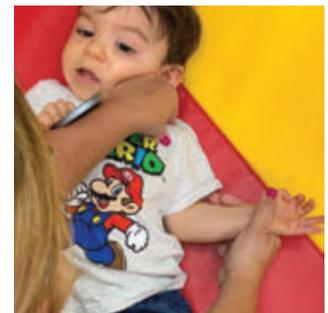
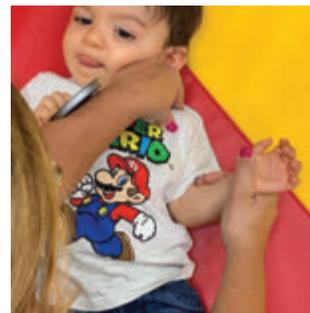


External and Internal Rotation Stretches (adducted against the trunk)

Position: Place child on his/her back with upper arm close to trunk.

Action: Stabilize shoulder blade with one hand. Bend elbow to 90 degrees and move forearm out to side. Maintain stretch for 10 seconds at the point where you feel resistance. Then bring forearm in toward belly and hold for 10-second stretch. Forearm will be positioned on belly for this stretch.*

**Perform five repetitions with each diaper change. Stabilize shoulder blade throughout.*



Elbow Flexion/Extension

Position: Place child on his/her back. Place towel roll underneath elbow.

Action: Place one hand over front shoulder while the other hand gently lowers forearm down toward mat. Hold for 5-second stretch. Then bend elbow toward shoulder and also hold for 5-second stretch.*

**Avoid shoulder from popping up during the stretches. May also use moist heat before these stretches.*



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Forearm Rotation

Position: Child is sitting or may be placed on his/her back with elbow bent to 90 degrees.

Action: Rotate forearm so that palm faces up and hold for 5-second stretch. Rotate forearm so that palm faces down and hold for 5-second stretch.*

**Keep upper arm against trunk and elbow bent to 90 degrees throughout.*



Wrist Flexion/Extension

Position: Child is sitting or may be on his/her back.

Action: Place hand on child's palm and raise hand up toward ceiling. Hold for at least 5 seconds. Then lower wrist by gently pressing down on back of child's hand and hold stretch for 5 seconds.



Finger Stretches

Position: Sit child on your lap

Action: Bend thumb into palm and hold for 5 seconds. Stretch thumb out and away as if making the shape of an "L".

Bend all fingers fully into palm to make a full fist and straighten all fingers out to fully open hand.



For questions about your home exercise program, please contact:

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