



# Brachial plexus birth injury

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**This leaflet is for parents whose baby has been diagnosed with a brachial plexus birth injury, which affects the nerves that supply the arm. It provides general advice and tells you about the exercises you should do with your baby to help correct this condition.**

**If your baby has a broken bone, do not start these exercises until your physiotherapist advises that it is safe to do so. If you have any questions or concerns, talk to your physiotherapist.**

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## What is a brachial plexus birth injury?

It is a condition that happens during birth and affects one or more of the five nerves of the brachial plexus coming from the neck into the arm, supplying the movement and feeling to your baby's arm. This injury happens during birth. Your baby's arm can be partially or completely paralysed (unable to move or feel), depending on the amount of damage that the nerves have received or the number of nerves affected.

Recovery depends on how much damage has been done to the nerve. If the nerves are only bruised or swollen, the paralysis may get better in the first days or month. It is difficult to predict what improvement there will be, but your doctor or physiotherapist will be able to give you a clearer idea of prognosis at around six weeks after birth.

Brachial plexus birth injury is diagnosed after an assessment by either a midwife or doctor. You will be referred to a physiotherapist and shown exercises to do with your baby.

Gentle exercises to the arm will help to stimulate the nerves and encourage the return of feeling and movement. It is important to do the exercises regularly (e.g. with every nappy change) to stop the arm getting stiff.

## General advice

When picking up your baby, give their arm support and prevent it from hanging down.

You can stimulate the skin on the affected arm after you have bathed your baby by briskly rubbing it dry. This will help with the sensation in the arm.

When feeding, try different positions that work best for you. Keep baby's arm across their chest during a feed.

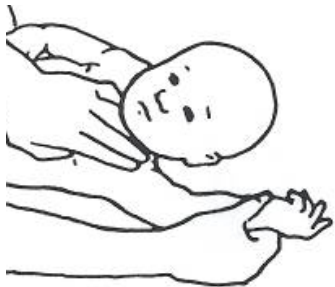


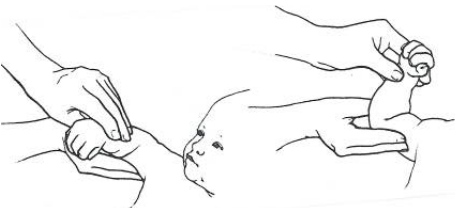


While dressing your baby, always put the weak arm into clothes first and take it out last when undressing. Dress them in loose-fitting clothes until the arm starts to regain some movement, so it is easier to put clothes on without causing injury to their arm.

Make sure your baby is swaddled in a blanket to help support their arm when laying them on their back to sleep or moving them around.

You can still lie your baby on their tummy or side while they are awake. You may need to position their arm under them, as they do on their other side. Only lie them on their affected side for short periods of time.

## The exercises

Exercises should be carried out on the affected side only while your baby is relaxed and should never be forced or painful. Do the exercises slowly and steadily with your baby lying on their back. You can start these exercises when your baby is five days old.

<p><b>Exercise 1: Shoulder flexion:</b> Lift your baby's arm above their head whilst supporting their shoulder with the other hand, keeping the elbow straight. Hold for 10 seconds and repeat 5 times.</p> 	<p><b>Exercise 2: Shoulder rotation:</b> With the baby's arm down by their side and their elbow bent to 90 degrees, move their hand out away from their body as far as it comfortably goes and hold for 10 seconds. Repeat 5 times.</p> 
<p><b>Exercise 3: Elbow flexion:</b> Hold the elbow joint in one hand and bend the elbow to touch the baby's face with their free hand. Repeat 10 times.</p> 	<p><b>Exercise 4: Upper arm rotation:</b> Hold the baby's arm at 90 degrees from the body with the elbow bent. Grasp the wrist firmly between two fingers. Rotate the lower arm so the palm of the hand is facing upwards. Hold for 10 seconds. Repeat 5 times.</p> 
<p><b>Exercise 5: Forearm supination:</b> Hold the arm as for shoulder rotation. Turn the palm of the hand over so it is facing upwards. Hold for 10 seconds and repeat 5 times.</p> 	<p><b>Exercise 6: Wrist and hand movement:</b> Stabilising the forearm with one hand, hold your baby's hand with your other hand. Gently bend the wrist forward and back 5 times. Then with the wrist in a relaxed position bend your baby's fingers as if making a fist and then gently straighten them out, repeat 5 times.</p> 

### References:

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Therapy Skill Builders (1987) A division of Communication Skill Builders

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