

UPPER LIMB BIRTH INJURIES INCLUDING BRACHIAL PLEXUS PALSY

Not all neonatal brachial plexus palsies are due to birth injury – other reasons for uni- or bilateral palsies include transverse myelitis, osteomyelitis spine, spinal stroke, spinal abscess

TYPES OF BIRTH-RELATED UPPER LIMB INJURIES

- Brachial plexus palsy may be congenital occurring in-utero or acquired during delivery to injury from traction injury of brachial plexus nerves – may be unilateral or bilateral and can be associated with fractures of the ipsi- or contralateral clavicle or humerus
- Isolated fractures to humerus or clavicle
- Isolated radial nerve palsy of the newborn

ASSESSMENT OF ALL BABIES WITH REDUCED UPPER LIMB MOVEMENT

- Examine the arm and neck for swelling, bruising, tone, posture and degree of movement
- Assess for breathing difficulties and Horner's syndrome
- Document findings clearly in case notes
- Explain to parents that recovery probable but may not be complete
- Inform consultant obstetrician/paediatrician (in charge clinician)
- If there are obstetric concerns, or internal manoeuvres are used to deliver the baby, then an x-ray of the affected side (arm and clavicle) should be performed

MANAGEMENT

- X-ray humerus/clavicle to exclude fracture
- if fracture of clavicle clearly seen, reassure parents and review baby at 3 weeks when movement should be returning
- if fracture of humerus is clearly seen, offer strapping of arm to chest for comfort and contact paediatric orthopaedic surgeon for follow-up
- In case of classical waiter's tip position or other cases of peripheral nerve injury e.g., radial nerve palsy. Use TriVice app or web-based application for guidance if unclear pathway (see below)
- refer to Children's Hand and Upper Limb Service at BCH if no recovery of arm movement at 3 weeks. Refer by email to bwc.handsandupperlimb@nhs.net
- Refer to inpatient neonatal physiotherapist (where service is available) for an assessment before discharge
- If not seen by a physiotherapist before discharge, refer to local children's community physiotherapy service
- Paralysis of the arm, which is **completely** resolved does not need to be referred but if there is any doubt, **all** babies can be seen in a hand clinic, either remotely or face-to-face so that a specialist assessment can be made and the parents can be given appropriate information

BIRMINGHAM CHILDREN'S HAND AND UPPER LIMB SERVICE:

- Fax referrals will not be accepted
- For advice and guidance please use <https://bwc.trivice.net> or via the app TriVice (Triage, Referral and Advice) which can be downloaded for all NHS staff via App store and google store
- Any referral should be done by letter and / or with the filled in referral form, which can be emailed to the secretary
- Email secretary with referral: bwc.handsandupperlimb@nhs.net
- Tel: 0121 333 8136/8285

Link to referral form: <https://bwc.nhs.uk/hand-surgery-information-for-professionals>