

Outpatient Brachial Plexus Palsy Physical Therapy Guidelines

Inclusion Criteria: Infants born or post-trauma with signs of Brachial Plexus injury/palsy or shoulder dystocia, including lack of shoulder and/or biceps activation on one side.

Exclusion Criteria: Other probable diagnosis such as stroke or genetic presentation for cause of limited movement.

Urgent Outpatient Physical Therapy Evaluation at CHOC 2 weeks after discharge.

- Follow up regarding if patient has an appointment scheduled with Brachial Plexus clinic or Refer to BP Clinic ASAP; Ortho Case Manager.
- Ensure/Request if parents know if CCS MTP application paperwork was submitted.

Precautions (+/-Fracture)
See Neonatal Brachial Plexus Palsy Guideline (insert hyperlink)

Evaluation/Assessment

- BP Clinic: Dr. Leis/Plastic Surgeon consult and OT Eval including: birth history, Active Movement Scale, > 2y.o.: Mallet Classification.
- OP Physical Therapy Evaluation: Active Movement Scale, if Torticollis present as well: Cervical PROM with arthrodial goniometer, MFS, or PDMS-II Test (as needed).

Treatment/Interventions

- OP PT Evaluation and Land (2x/week) and Aquatic Therapy (1x/week) to begin as soon as authorized for first 3-6 months at CHOC, or until Case Manager transitions land to CCS MTU.
- Electrical stimulation/Kinesiotape: may start NMES/Kinesiotape 6-8 weeks post-injury.
- GOALS: desensitize, improve ROM, bimanual play, parent education, improve weight bearing tolerance and strength.

Discharge Criteria

- Less than 4 point overall improvement in 2 muscles during Active Movement Scale testing.
- Non-compliance with attendance policy.
- MD Discharges patient from Aquatic PT here at CHOC.
- Authorization terminated through CCS Case Manager.

Recommendations/Considerations/Prognosis

- **Horner's syndrome:** Surgery may occur at or before 3 mo old.
- **3-5 months:** No biceps return with/without Horner's, most likely avulsion, requires nerve transfer; Followed 1x/mo at BP Clinic- **Transition to OP Brachial Plexus Post-Op Guidelines.**
- **6 months:** No biceps return, likely upper nerve, will require surgical intervention; Followed by BP Clinic every 3 months.
- **At 9 months:** Unable to pass Cookie Test (hand to mouth): Requires surgical intervention.
- **12 mo to 2 y.o.:** Scapular winging, decreased shoulder flexion, abduction, supination; may benefit from tendon transfer surgery.
- For ALL: DO NOT LIFT or PULL involved arm; Lift from trunk and support involved arm.

Patient Education

- Education regarding progression to weight bearing.
- Education regarding aquatic therapy.
- Handouts: Brachial Plexus Palsy positioning and range of motion exercises.
- Give Brachial Plexus Palsy Brochure if they have not received one.
- Give CHOC website for Aquatic Therapy video.

References

Brachial Plexus Care Guideline

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