

ERB'S PALSY



WHAT IS IT?

- Clinical presentation: infants or babies present with arm in extension and wrist fully flexed
- Muscle weakness with shoulder flexion, abduction, and rotation
- Sensory deficits to the posterior and lateral aspect of the arm
- Usually happens during trial birth
- “Waiter’s tip deformity”



ANATOMY

- Injury to c5-c6 nerve roots and the muscles innervated by these nerve roots (brachial plexus)
- Deltoid (axillary nerve), biceps brachii (musculocutaneous nerve), brachialis (musculocutaneous nerve), supraspinatus (suprascapular nerve), infraspinatus (suprascapular nerve)

DIFFERENTIAL DIAGNOSIS

- Clavicle/humerus fracture (rule out with x-ray)
- arthritis/osteomyelitis in shoulder
- Spinal cord/brachial plexus injury
- Parsonage Turner syndrome: very painful



SPECIAL TESTS

- Clinical presentation is huge
- MMT (depending on child’s ability to participate)
- EMG, nerve conduction testing

TREATMENT EXAMPLES

- Surgery if injury is significant enough
- Identify weaknesses and improve them
- Decrease occurrence of tightness and contractures
- Encourage normal movement and function and typical milestones
- Education with parents/caregivers to avoid exacerbation of symptoms
- Prevent the injury from getting worse
- EStim could be applied to maintain muscle strength
- Taping
- Constraint Induced Movement Therapy (CIMT): avoid learned non-use



<https://www.aureusmedical.com/npteststudycast>

An Affiliate of C&A Industries, Inc.

AUREUS
MEDICAL GROUP