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Test Your Knowledge

A BABY WITH AN ABNORMAL UPPER LIMB

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Baby A, a three-month-old girl was noticed to have an abnormal posture and weakness of the right upper limb shortly after birth. She was delivered at term via an apparently normal vaginal delivery with vertex presentation. The birth weight was normal (3 kg).

Figures 1 and 2.

Questions

1. Describe the clinical findings.
2. What is the diagnosis?
3. What is the cause of the condition?
4. What are the treatment options?

Answers

1. The arm is medially rotated by the side of the body and the elbow is extended. The wrist and fingers are flexed and faced backwards (the so-called "waiter's tip" hand).
2. Erb's palsy – brachial plexus injury involving the upper roots, C5-C6.
3. The incidence of Erb's palsy was in the order of 1:500 to 1:1000 term births.[1,2] Erb's palsy was traditionally viewed to be caused by clinician-applied excessive lateral traction on the foetal head and neck.[3,4] Risk factors include shoulder dystocia, breech delivery, increasing birth weights and abnormal labour. However studies have shown that there are a substantial proportion of cases that occurred with normal labour and delivery. There are evidences that non-iatrogenic causes like maternal propulsive forces may be an important contributing factor.
4. Physical therapy is usually instituted while awaiting spontaneous recovery. When an injury is unlikely to improve after observation for 3-6 months, a variety of nerve surgery and muscle transfer surgery may be necessary.[5]

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