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Case # 3 - Erb's Palsy

Presentation: You notice that your newborn infant boy has difficulty moving his right arm. You bring the infant to see his pediatrician. You explain that your child's birth was not an easy one. He was close to 10 pounds at birth and forceps were used in his delivery. Otherwise, things have been unremarkable. The infant can move his fingers and can easily grasp objects with his fingers. However, his shoulder and arm do not seem to work properly. Examination reveals the following: atrophy of shoulder and arm musculature, inability to abduct the shoulder, loss of sensation along the posterior lateral surface of the arm. The forearm is in a prone position, the arm adducted. The infant's face and eyes appear normal and the skin of the upper limb is warm and exhibits good color. The doctor explains your son has Erb's palsy, possibly resulting from the delivery. Use your knowledge of the anatomy of the upper limb and your Segmental Innervation Chart to answer the following:

Activities:

- Draw the brachial plexus showing the terminal branches and the branches that come from the root, trunks and cords.
 1. Color in the distribution of axons derived from C5 and C6.
 2. Identify the nerve branches that contain C5 and C6 axons only.
- Provide a table that shows the origin, insertion and function(s) of the muscles containing C5 and C6 axons.
- Use this chart to determine what movements will be affected by a lesion to C5 and C6 and how will they be affected (weakness or loss of function).

Discussion:

- Define and explain the anatomy of Erb's Palsy.
- Discuss the relationship between the circumstances involving the baby's birth and Erb's Palsy.
- Discuss the significance of the findings that the arm had good color and was warm, and that the face and eyes appeared normal.

Prognosis:

- Discuss the child's prognosis.
- If there is no improvement, the child's upper limb will exhibit "Waiter's Tip Position".
 1. Describe this position.
 2. Discuss the anatomical basis of this position.