Facial Asymmetry in a Newborn

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A term male neonate was born to a primiparous with a birth weight of 3,250 g and Apgar score of 7/9/10 at one, five, and ten minutes, respectively. He was born by forceps assisted vaginal delivery. Physical examination at birth revealed a left periauricular ecchymosis, a facial asymmetry with a deviation of the angle of mouth to the right side, especially on crying, absence of forehead wrinkling, absence of nasolabial fold on the left side, impaired left eye closure, and complete absence of facial movements on affected left side (Figs. 1 and 2). This infant had no difficulty in feeding. There was no dysmorphism, changes in muscle tone, or respiratory distress. Signs of other cranial nerve involvement that could lead to a brainstem lesion were not seen. A diagnosis of a lower motor neuron type of facial palsy was made. The cerebral ultrasound was normal. He was managed with artificial tears. Eye padding and palsy progressively improved in the follow-up and the facial palsy resolved spontaneously at 2 months of age.

The diagnostic evaluation of a newborn with facial palsy is made by physical examination and analysis of delivery history.[1] Facial palsy at birth incidence ranges from 0.2% to 6.9% and may be caused by external factors or due to a developmental defect.[2] The most common external factor is birth trauma or prenatal compression. It can occur during forceps application, compression injury from the shoulder in the intrauterine period, or intrauterine trauma on the infant's face by the sacral prominence during labor.[1] In addition, it has been recently reported that traumatic facial palsy can be secondary to the application of tight nasal continuous positive airway pressure.[3] Facial palsy can also be caused by developmental mishaps during the intrauterine life and is frequently seen in association with genetic syndromes like Mobius, CHARGE, and Goldenhar syndromes.[1] Complete facial palsy in a newborn also needs to be differentiated from neonatal asymmetric crying facies which is often underrecognized and it is defined as the asymmetry of the mouth and lips only with grimacing or smiling, but a symmetric appearance at rest, while complete facial palsy is also associated with upper and mid-face deformities.[4]

Traumatic lower motor facial nerve palsy in a newborn is frequently a self-limiting condition. Artificial tears and eye padding are essential to prevent the dryness of the affected eye. If there is no improvement by 3 months of age, electromyography should be performed because in congenital or syndromic causes, the facial palsy is not reversible.[5] In these cases, a magnetic resonance of the posterior fossa and a computed tomography of the temporal bone are crucial to exclude the structural anomalies of the facial nerve.[1]

Figure 1. Left facial nerve palsy. Absence of nasolabial fold on the left side.

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Figure 2. Left facial nerve palsy. Deviation of the mouth for the right side when crying.

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WHAT THIS REPORT ADDS

- In a neonate with facial nerve palsy, the distinction between traumatic and developmental etiologies is paramount to define the course of the disease and its management.
- The detailed analysis of the delivery history as well as a full-body examination are the basis of the evaluation.
- Most cases of facial nerve paralysis are associated with birth trauma and are self-limited conditions.

Conflicts of Interest

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Confidentiality of data

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