Asymmetric crying facies in a neonate with congenital hypoplasia of depressor anguli oris muscle (CHDAOM)

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Picture Report

A 28-day-old neonate born in an uneventful, unassisted vaginal delivery at term was admitted to the hospital for cyanosis. On examination, the baby had asymmetric frowning, complete eye closure, and normal extraocular movements. No facial asymmetry was observed when the baby was quiet and resting [Figure 1]. However, on crying, while the left corner of the mouth deviated downward and outward, the right corner did not [Figure 2]. The lower lip was thin near its right margin. The frontalis, orbicularis oculi, zygomaticus, and mentis muscles functioned adequately.

The child had central cyanosis, with normal S1 and single S2. An ejection systolic murmur was heard at the lower left sternal border. Echocardiography revealed double outlet right ventricle (DORV) with pulmonary atresia (PA), transposition of the great arteries (TGA), and patent ductus arteriosus (PDA).

The child was diagnosed with asymmetric facies due to right-sided congenital hypoplasia of the depressor angularis oris muscle (CHDAOM) with cardiac anomalies.

Asymmetric crying facies is found in 3-8/1,000 births.[1] It occurs secondary to nerve compression or faulty muscle development. CHDAOM is a clinical diagnosis, and electrophysiology is normal. It is differentiated from facial nerve palsy by the presence of normal eye closure, no drooling of saliva, and thinning of the lower lip on the affected side. It is associated with other congenital anomalies—such as cardiac syndromes;

Figure 1: Symmetrical face at rest with cyanosis

"CATCH 22" (DiGeorge) syndrome; and the nonrandom co-occurrence of vertebral anomalies, anal atresia, cardiac defects, tracheoesophageal fistula and/or esophageal atresia, renal and radial anomalies, and limb defects (VACTERL association)—that coexist in patients with 45-70% asymmetric crying facies.[2] Asymmetric crying facies due to CHDAOM in patients merits evaluation and treatment of associated anomalies. Familial occurrence has been reported, and the mode of inheritance has been suggested as autosomal dominant inheritance with variable expressivity.[3] If isolated, it is clinically benign and can

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Figure 2: On crying, the left corner of the mouth deviated to left and downward

be corrected for cosmetic purposes by plastic reconstruction surgery.[4] No difficulty is encountered while feeding or speaking. As the child grows up, the other facial muscles compensate for emotive actions.[3] Detection of CHDAOM, however, warrants a thorough evaluation for other birth defects, especially those cardiovascular anomalies.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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