Case Report

Indian Journal of Trauma and Emergency Pediatrics
Volume 8 Number 2, May - August 2016
DOI: http://dx.doi.org/10.21088/ijtep.2348.9987.8216.19

Asymmetric crying facies syndrome: Congenital Hypoplasia of Depressor Angularis Oris Muscle

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Abstract

One of the rare causes of asymmetric crying facies in newborn is Congenital hypoplasia of depressor angularis oris muscle (CHDAOM). In 45-70% of cases with this facial defect have been reported to be associated Major congenital anomalies [1,2]. This should always be differentiated from facial nerve palsy. We report a case of CHDAOM in a neonate.

Keywords: Congenital Anomaly; Facial Defect; Asymmetric Crying; Depressor Angularis Oris.

Case Report

A male neonate was born by spontaneous vaginal delivery to a 23 years old primigravida mother at term with uneventful antenatal and perinatal period. Birth weight was 2.9 kg. There was no history of birth trauma. Baby cries vigorously and can close eyes completely.When the neonate is quiet or sleeping the face was symmetrical Figure 1, while crying the left

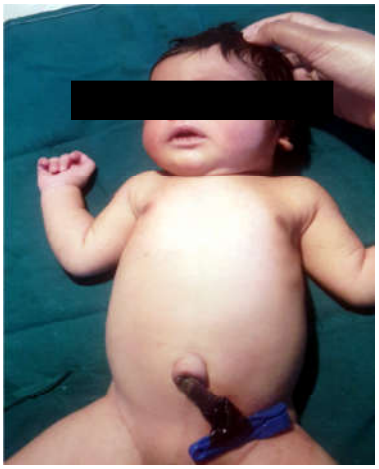

Fig. 1: While sleeping

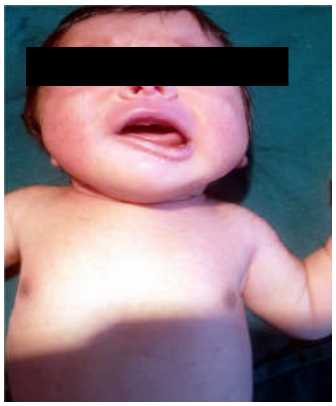

Fig. 2: While crying

corner of the mouth drew left and downward, while right corner did not move (Figure 2). Vitals were normal. There were no other anomalies. facial nerve functions like tearing, nasolabial fold depth, forehead was symmetrical. Extra ocular movements were intact. There was no neurological deficit. Systemic examination was normal. Blood investigation were normal. Chest radiograph, ultrasonography echocardiography normal. The neonate was diagnosed as a case of asymmetric crying facies due to congenital hypoplasia of right depressor angularis oris muscle.

Discussion

Congenital hypoplasia of depressor angularis oris muscle causes facial asymmetry, when infant cries . Asymmetric faces is estimated to occur in 0.25%-0.6% of infants [3,4].The depressor angularis oris muscle is

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innervated by buccal and mandibular branch. The DAOM draws the lower corner of the mouth downward and everts the lower lip. Hence on crying angle of mouth and mandible are pulled down on normal side due to unopposed action of DAOM.while Congenital Hypoplasia of Depressor Angularis Oris Muscle no movement on hypoplasia side. The lower lip on the affected side looks thinner because of the lack of eversion and muscle agenesis. The cause for agenesis of the muscle is not known.The diagnosis may be confirmed by electrophysiological studies. The facial nerve conduction time to the mentalis and orbicularis oris muscle are normal [5].

It is usually associated with cardiac, gastro-intestinal, genito-urinary anomalies and other malformations [3,4,6]. Our case was not associated with any anomaly . The common anomalies seen are head and neck (48%), congenital heart disease (44%), genitourinary tract anomalies (24%); skeletal (22%) and children with asymmetrical crying facies may have co existing DiGeorge syndrome, Velo-Cardiofacial syndrome and conotruncal anomaly face syndrome CATCH22,VACTERL and trisomy 18 [7-8].

It should be differentiated from other causes of facial asymmetry at birth like intra-uterine pressure and position over stylomastoid foramen during labor, which may cause facial paralysis. This is a benign condition and mainly a cosmetic problem. It does not cause difficulty in feeding or speech. The diagnosis can be made by careful physical examination of newborn and if present, neonate should be screened for associated anomalies. In an isolated anomaly, no treatment is needed because the asymmetry is not noticeable in a grown up child.

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