

## Congenital asymmetric Crying Facies: Case report

*Faical Kouskous<sup>1</sup>, Widade Kojmane<sup>1</sup>, Fouzia Hmami<sup>1</sup>, Kalmi Noura<sup>2</sup>, Hanane Baybay<sup>2</sup>, Fatima Zahra Mernissi<sup>2</sup>,  
and Moustapha Hida<sup>3</sup>*

<sup>1</sup>Department of neonatology and neonatal Resuscitation unit, University Hospital Hassan II, Fes, Morocco

<sup>2</sup>Department of Dermatology, University Hospital Hassan II, Fes, Morocco

<sup>3</sup>Pediatrics department, University Hospital Hassan II, Fes, Morocco

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**ABSTRACT:** Asymmetric crying facies in neonates is a rare condition that might be due to hypoplasia of the depressor anguli oris muscle and is characterized by asymmetry of lower lip depression during crying.

**Case report:** We report a full-term newborn delivered by cesarean section with an uneventful pregnancy among non-consanguineous parents. The newborns have an Apgar score of 9 and 10 at 1 and 5 minutes, respectively. His birth measurements were appropriate for his gestational age. His initial clinical examination was normal, apart from the presence of a red intersourciliary macule and an asymmetric face while crying, with the right lip corner disappearing at rest. In this clinical presentation, the diagnosis of asymmetric crying facies was retained.

**Conclusion:** Despite the fact that our patient has no other associated malformations, any facial paralysis that disappears at rest should be treated as a sign of asymmetric crying facies, and other malformations that may be associated should be screened for.

**KEYWORDS:** Congenital, facial asymmetry, cherry angioma, depressor angularis oris muscle, screening.

### INTRODUCTION

Congenital asymmetric crying facies (CACF) is a rare condition often misdiagnosed. It is mainly caused by the absence or hypoplasia of the depressor anguli oris muscle (DAOM) on one side of the mouth. This can be an isolated clinical finding or be coupled with other congenital malformations, most commonly in the cardiovascular system, and it is known as CACF syndrome. The typical clinical picture is a significant unilateral depression of the lower lip during crying, seen immediately after delivery, which disappears on rest.

Pediatricians must be familiar with this benign entity and differentiate it from more complicated situations requiring further investigation.

We report a neonate with CACF associated with a cherry angioma without other associated malformations.

### CASE REPORT

We present the case of a female newborn with nonconsanguineous parents who presented with a cherry angioma and an asymmetrical face when crying. It's a 41-week gestational age neonate who was born by cesarean section after an uncomplicated pregnancy.

She had a birth measurement appropriate for his gestational age: a weight of 3300 g, a length of 52 cm, a head circumference of 35 cm, and Apgar scores of 9, 10, and 10 at 1, 5, and 10 minutes, respectively.

His initial clinical examination after delivery was normal, apart from the presence of intersourciliary bright red, flat macules and symmetrical labial commissures at rest (Figure 1) and an asymmetrical face during crying, with the right labial commissure and the right half of the lower lip drooping while the left commissure did not move (Figure 2).

The physical examination as well as the investigations necessary to search for a known association with minor and major congenital anomalies and malformations, notably cardiovascular, were normal, with no obvious dysmorphism or anomaly. The diagnosis of asymmetric crying facies was retained based on clinical criteria. The situation was explained to the parents, and the baby was entrusted to his family. Her 6-month follow-up showed the same picture, with the parents' assurance and appointments for regular follow-up visits.



**Fig. 1.** *The asymmetrical crying face at rest*



**Fig. 2.** *The asymmetrical crying face during crying*

**DISCUSSION**

CACF is a relatively common minor anomaly with an overall incidence of 0.6% (1). It is mainly caused by the absence or hypoplasia of the depressor anguli oris muscle (DAOM) on one side of the mouth (2). Another cause is the lesion of the peripheral branches of the facial nerve, in particular the mandibular branch that passes superficially over the mandible in newborns during delivery (3). The typical clinical picture is a significant unilateral depression of the lower lip during crying, seen immediately after delivery, which disappears at rest (4).

The pathogenesis of hypoplasia of the depressor anguli oris muscle is unknown; it has previously been suggested that it is secondary to abnormal fetal posturing or viral infection during pregnancy, but genetic implications have been reported (5,6,7). A retrospective review reported a 14% incidence of CACF in patients with a 22q11.2 deletion, significantly higher than in the general population (8).

Some studies showed that newborns with CACF have a 3.5-fold higher risk of association with other major congenital anomalies like cardiac (4, 8), cervicofacial (1, 9, 10), neurological, genitourinary, gastrointestinal, skeletal, and genetic syndromes (9-13). Other reported associations with CACF include hemihypertrophy, cystic lymphangioma, collodion baby, and pulmonary agenesis (12-17). Minor anomalies such as anal/preauricular tags, pilonidal sinus, single horizontal palmar crease, accessory nipple, and strawberry hemangioma (9, 10) were also described. To our knowledge, associations with cherry angiomas have never been reported.

CACF secondary to compression of the mandibular ramus usually resolves spontaneously within a few months; however, when the cause is secondary to muscle agenesis or hypoplasia, it may be less noticeable with age when the functions of the other facial muscles and the smile dominate the child's facial expressions (18). In the event of no improvement, plastic surgery can be proposed (1).

**CONCLUSION**

A careful physical examination of newborns is important for the early diagnosis of CACF. If hypoplasia of the anguli oris depressor muscle is found, a search should be made for associated anomalies.

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