



Congenital Marin-Amat Syndrome and Asymmetric Crying Face: A Case Report

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Abstract

Marin-Amat syndrome is a rare facial synkinesis and is characterized by the eyelid drooping on jaw opening. It is mostly an acquired phenomenon occurring after peripheral facial paralysis and very rarely congenital. Asymmetrical crying face is a rare minor congenital anomaly, that is the result of unilateral agenesis or hypoplasia of the depressor anguli oris muscle. Our case is the second one in which the onset of Marin-Amat Syndrome is congenital and the first case with asymmetric crying face.

Keywords

Asymmetrical crying face, Congenital, Marin-Amat syndrome

Introduction

Marin-Amat syndrome is a rare facial synkinesis and is characterized by the eyelid drooping on jaw opening. It is mostly an acquired phenomenon occurring after peripheral facial paralysis and very rarely congenital [1,2]. Congenital asymmetric crying facies is a minor congenital anomaly due to absence or hypoplasia of the depressor anguli oris muscle on one side of the mouth. It is frequently associated with other organ anomalies [3,4]. Herein we describe a case of congenital Marin-Amat syndrome and asymmetric crying face (ACF) in a seven month-old girl.



Figure 1: A) Symmetric appearance at rest; B) Synkinetic right eye closure while crying and right-sided asymmetric crying face.

Case Report

A seven month-old girl was admitted to our hospital with the complaint of facial palsy from birth. She was the first child of non-consanguineous parents. She was born following a spontaneous vaginal delivery at term. Past medical history and family history were unremarkable. Her neuromotor development was appropriate for her age.

Abnormal synkinetic movement manifesting with eye closure on jaw opening or during crying were observed while examination. The eye closure occurred only with wide jaw opening. And also the right corner of the mouth went to right and downward while crying. Her face appeared symmetric at rest (Figure 1). Systemic examination was essentially within normal limits.

The results of routine laboratory investigations, thyroid function test, ophthalmologic examination, echocardiography, abdominal ultrasonography and brain magnetic resonance imaging were all normal. Electromyography could not be performed.

Discussion

Asymmetrical crying face is a rare minor congenital anomaly, that is the result of unilateral agenesis or hypoplasia of the depressor anguli oris muscle. Symmetric appearance of the oral aperture and lips at rest, but significant depression of one side of the lower lip with crying is the clinical hallmark. Though it is an isolated finding in most cases, ACF can be associated with other congenital malformations. It may be associated with cardiovascular, musculoskeletal, genitourinary, and respiratory defects [3-5]. In our case, there was no other associated abnormalities except Marin-Amat syndrome.

In Marin-Amat syndrome, except one case reported by Lubkin [6], all cases are acquired. It often occurs after peripheral facial nerve palsies [1,2]. Our case is the second one in which the onset of Marin-Amat Syndrome is congenital and the first case with asymmetric

crying face. The exact pathogenesis of both Marin-Amat syndrome and asymmetrical crying face is unclear, some hypotheses have been put forward. It has been reported that agenesis or hypoplasia of the facial muscles is probably of primary origin, but may be secondary, with degeneration resulting from denervation [5]. Marin-Amat syndrome has been suggested to be a result of aberrant re-innervation of the trigeminal and facial nerves [1,2]. We suggest that both congenital Marin-Amat syndrome and asymmetric crying face were due to a common mechanism such as peripheral anastomosis of the facial nerve which have a connection with branches of the maxillary nerve and buccal branches of the mandibular division of the trigeminal nerve. Further studies are required. The other facial synkinesis and Bell's palsy be considered in the differential diagnosis and detailed neurological examination should be performed. If looked for carefully in children with facial nerve palsy, Marin-Amat Syndrome will be diagnosed more often.

References

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