Medical and Research Publications
International Open Access

Case Report **Journal of MAR Pediatrics (Volume 1 Issue 3)**

A Case of Idiopathic Recurrent Contralateral Bell's palsy in a Young Male Patient

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Received Date: October 07, 2021

Published date: November 01, 2021

Abstract

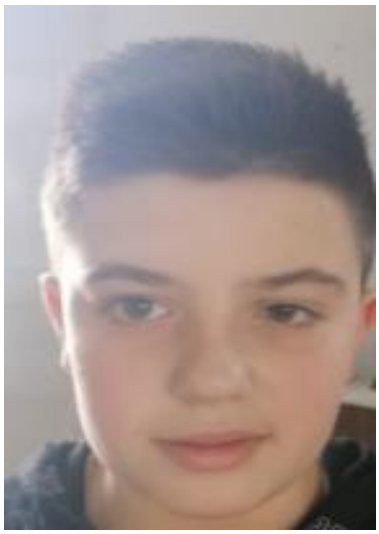
Bell's palsy in pediatrics is not an uncommon finding, but having it recur in a healthy boy contralaterally with no underlying disease or syndrome makes it a rare occurrence. We present a case of an 11-year-old boy with idiopathic recurrent contralateral Bell's palsy who had complete recovery after both episodes.

Keywords

Facial Palsy, Bell's palsy; Melkerson- Rosenthal Syndrome

History

The case is an 11-year-old Lebanese boy patient born to healthy non consanguineous parents who previously had 1 healthy son. He was delivered at the hospital by a normal, uncomplicated vaginal delivery with a birth weight of 3500g and a head circumference of 35 cm. The patient presented to our clinic for left facial deviation and inability to close his right eye with right facial weakness. He was diagnosed as having Right Bell's palsy **(**Right Facial Paralysis**)) (**fig.1**)**.

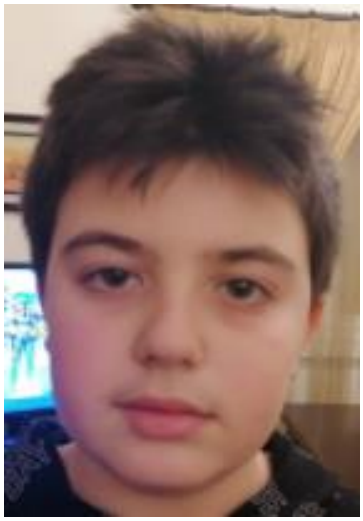


He received: Prednisone 60 mg orally daily for 5 days followed by a 5-day taper; and eye lubricating drops. Acyclovir was not used because we didn't have any herpetic vesicles in the external ear canal, and had a complete recovery within a month of first symptoms. Two months later, he presented with left facial weakness, inability to close his left eye, and again a diagnosis of Bell's palsy was made but this time it was on the left. This was indicative of recurrent contralateral Bell's palsy.

Neonatal history was unremarkable; his neurological history was negative. No previous hospitalizations.

On the first physical examination, the patient was conscious, alert and cooperative. His pupils were symmetric and reactive to light. Right facial weakness, inability to smile nor to close his eye on the right side. No vesicles were seen.

Two months later, his physical exam shared the same facial weakness on the left side, with a completely normal right side **(**fig.2**)**.



A month after treatment, the weakness disappeared, and the right side of the patient's face was completely normal. And because it is a bilateral Bell's palsy, we asked for CBCD, electrolytes, calcium, thyroid function tests, carcinoemberyonic antigen **(**CEA**)** which is usually elevated in sarcoidosis, rheumatologic workup, chest x-ray, magnetic resonance imaging **(**MRI**)** of the brain, and all turned out to be within normal limits.

Discussion

Pediatric facial palsy also known as Bell's palsy is usually unilateral paralysis of the 7th cranial nerve. The etiology can be congenital and acquired, with herpes simplex 1 **(**HSV1**)** being an infectious cause, yet in the pediatric population, most of the time, a clear cause cannot be identified and this has imposed the theory of a post infectious autoimmune process as the most common cause. **[**1, 2**]**

Bell's palsy in pediatrics, as in adults, usually presents with acute, unilateral, facial weakness effecting the upper and lower face preceded by viral infections around **(**60%**)** of the times. **[**3**]**

Most patients usually regain normal regain normal function, even sometimes without treatment, within 3 weeks. **[**4**]** Some claim that a delay in the diagnosis and administration of treatment could affect the processes of complete recovery, hence causing residual weakness of the face and mouth. Other factors such as severity of the case and compression of the facial nerve are equally significant. Age and the degree of facial paralysis are other reported prognostic factors, the younger the patients are and the milder the facial palsy is, the better the chances of gaining almost full recovery. **[**5**]** The recurrence of Bell's palsy is rare, most patients suffer from a single attack, yet multiple attack whether ipsilateral or contralateral have been reported in the adult population with a recurrence rate ranging from 10 to 15 %. **[**6**]** A retrospective study done on the files of 182 pediatric patients with a diagnosis of Bell's palsy showed that, 11 patients **(**9 females and 2 males**)** had recurrent facial palsy. The 2 boys were found to have Melkersson-Rosenthal Syndrome, this syndrome usually presents with recurring facial paralysis,

swelling of the face and lips **(**usually the upper lip**)**, and the development of folds and furrows in the tongue. **[**7**]** This higher incidence rate among females to male patients in the pediatric population was also confirmed in another study, testing the demographic characteristics of Bell's palsy in the pediatric population. **[**8**]** The recurrence of Bell's palsy has been reported in certain families, with a familial type being described. **[**9**]**

Conclusion

Given all the evidence in the literature regarding Bell's palsy in the pediatric population, the fact that our patient, an 11-year-old boy with recurrent contralateral Bell's palsy with no associated symptoms indicative of any syndrome **(**like Melkersson-Rosenthal**)**, no history of HSV1 infection, with a normal blood and imaging workup, no family history of recurrent Bell's palsy, and having complete recovery of both episodes, makes our case and interesting and reportable case.

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