



PAEDIATRIC BELL'S PALSY

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ABSTRACT

Objective: To report a case of paediatric Bell's palsy and associated outcome.

Case report: An 12 years old boy with childhood obesity presented with acute onset of right sided facial weakness for 1 day associated with right eye blurred vision. On examination, child had right facial palsy involving the loss of right nasolabial fold and unable to close the right eye completely. Other cranial nerve findings were normal. Child was treated with a course of prednisolone. Facial nerve function recovered fully at 1 month follow up with no further intervention.

Conclusion : Bell's palsy in paediatric age group patient is relatively rare and regards as diagnosis of exclusion. Recovery was reported well with the treatment of steroid.

KEYWORD

Facial nerve palsy, Bell's palsy, Paediatric Nerve Palsy, Steroid

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INTRODUCTION

Bell's palsy is an acute lower motor neuron disease of facial nerve. Facial nerve is a mix nerve. It is a major motor innervation nerve but it also has autonomic innervation as well as sensation to part of the ears. Paralysis of this major nerve gives an obvious impact particularly on a paediatric age group patient.

Bell's palsy is a diagnosis of exclusion. It usually affects 1 side of the face. Numerous conditions need to be ruled out before a Bell's palsy diagnosis is concluded such as trauma, neoplasm, ear infection etc. The etiology of Bell's palsy is unknown. The most widely accepted theory is viral infections such as Herpes Simplex and Varicella Zoster, which presumed to cause the inflammation of the nerve.

CASE REPORT

An 11 year-old boy brought to the ENT clinic by his mother with history of sudden onset right sided facial weakness for 1 day with right eye blurred vision. Mother denied any history of trauma. No prior history of fever, upper respiratory tract infection or ear infection. On examination, he was alert and comfortable. There was facial asymmetry with loss of right nasolabial fold. Further examination showed that he was unable to close the right eye and puffed the cheek. Otherwise, sensation was intact. No other neurological deficit. He was treated as right Bell's palsy House Brackmann grade 5.

He was treated with oral steroid 1 mg/kg for 1 week. The care

for exposure keratitis of the right eye was given as well. One week later, the right sided facial nerve weakness improved. He was able to close the right eye tightly and there was appearance of the right nasolabial fold. Facial nerve function recovered fully at subsequent 1 month follow up. He was followed up by ophthalmology team for 4 months for the exposure keratitis. We had no encounter any side effect or complication from the steroid usage.

DISCUSSION

Pediatric facial nerve palsy can be congenital or acquired. Despite efforts to define its etiology the cause of paralysis can often remain unknown. There are several implications particularly when it occurs among paediatric age-group¹. A detailed history taking and diagnostic workout are particularly important in case of pediatric facial nerve palsy in order to establish the most appropriate management. Radiological investigation such as MRI is not routinely done unless there is no recovery after 3 months or in recurrent cases⁵.

Bell's palsy can range from minimal weakness of facial nerve to a complete paralysis of the facial nerve. Study showed incomplete lesion carried a better prognosis compared to complete lesion². In terms of age, the prognosis is better in the younger children².

Whether or not to treat a child with facial nerve palsy is a controversy⁵. The main agents used for the treatment of Bell's

palsy are steroids. The anti-inflammatory effect of steroids (such as prednisolone) is assumed to minimize facial nerve swelling, compression and damage, therefore reducing the length of time to recover and increasing the likelihood of recovery^{3,5}. Bouulloche et al⁴ did a study from 1 to 16 year-old patient with facial nerve palsy found that who received steroid treatment had no better outcomes than who did not, however noted that the recovery was earlier.

We commenced steroid treatment of 1mg/kg tapering dose over 1 week for our patient. The child recovered completely after 1 month. There was no side effect at all. It probably worked very well in our patient because he is young and we started the treatment early as the patient presented to us on day 1 of the onset itself. The use of acyclovir as part of the treatment is also controversial⁵. We opted not to use acyclovir because our patient did not give history of recent viral infection. Most pediatric trials did not yield concrete evidence of the beneficial role of acyclovir in the treatment of Bell's palsy⁵.

CONCLUSION

Facial nerve paralysis in paediatric age group is rare. Bell's palsy is the most common cause of facial nerve palsy in children. The treatment is aimed at a complete recovery and reduced complication. A detailed diagnostic workout is recommended in order to establish the diagnosis and the most appropriate treatment for the patient.

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