
A Case Study on Recurrent Bells Palsy

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ABSTRACT: 12 year of female child presented with right sided facial weakness since 3 days, fever and cold for 1 day. She had 2 episodes of left sided facial weakness in the past 1 and 1.5 years. She had finding suggestive of right LMN palsy. In view of covid exposure she was not put on steroids and managed symptomatically for fever. At follow up in 2 months she had complete recovery from bell's palsy without steroids and physiotherapy.

KEYWORDS: Right sided facial weakness, lower motor neuron palsy of facial nerve, recurrent, steroids, physiotherapy

CASE REPORT

A 12-year-old female child of Moroccan nationality presented with complaints of right sided facial weakness since 3 days, fever and runny nose since 1 day, she was exposed to a covid patient at home. There was no h/o trauma, headache, vomiting, ear pain no impairment of hearing or taste. She had similar 2 episodes of left sided facial weakness in the past 1 and ½ years.

On examination she had loss of nasolabial fold on right side, unable to close eyelid completely on right side, angle of mouth deviated to left, findings suggestive of right sided facial nerve paralysis of LMN type. Other neurological examination, systemic and general examination including blood pressure was normal. There was no facial edema or tongue fissure, no family history of facial nerve palsy. Her covid test came negative. She was treated symptomatically for fever, steroids were not advised in view of covid exposure and follow up was done on phone which revealed she had only a day of fever and no other symptoms, with weakness gradually improving. She came for follow up only after 2 months with complete recovery without any medicines or physiotherapy, the weakness improved gradually over 4 weeks.

The previous 2 episodes were treated with steroids and physiotherapy, with symptoms lasting 4-6 weeks for complete recovery without any residual symptoms/signs. There was no significant family history. Her blood works and CT scan brain (done during the first episode) were normal. Based on examination, past and family history and investigations diagnosis of recurrent facial nerve palsy involving contralateral sides, of idiopathic origin (recurrent Bell's palsy) was made .

INTRODUCTION

Bell's palsy is an acute peripheral facial nerve palsy that is not associated with other cranial neuropathies or brain stem dysfunction. It is a common disorder at all ages from infancy through adolescence and usually develops abruptly about 2 weeks after a systemic viral infection. The preceding infection is caused by Herpes Simplex Virus ,Varicella-Zoster virus ,Epstein barr virus ,Lymes disease, mumps virus, toxocara, rickettsia ,mycoplasma or HIV infection. Active or reactivation of herpes simplex or varicella-zoster virus may be the most common cause of Bell's palsy (21)

CLINICAL MANIFESTATIONS

The upper and lower portions of the face are paretic ,corner of the mouth droops and patients are unable to close their eye on the involved side and can develop exposure keratitis at night. Taste on the anterior 2/3 rd of the tongue is lost on the involved side in 50% cases .Acute hearing loss may occur in Bell's palsy associated with rickettsia infection. Several grading system have been devised for Bell's palsy including the Sunnybrook, House Brackmann and Yanagihara systems.

Even though Bell's palsy is common , only about 6.5% of such cases experience recurrence (2,3,4,17).The frequency of recurrent facial nerve palsy in children was similar to that in adults. The most significant factors in the evaluation of recurrent facial nerve palsy are medical history and physical findings at diagnosis and after short follow-up. The rate of full clinical recovery in recurrent Bell's palsy is about 70%, lower than in primary Bell's palsy (19)

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One more rare disorder to be considered in cases of recurrent facial nerve palsy is Melkersson Rosenthal syndrome , a neurological disorder occurring in young adults mostly females between 11 to 30 years of age , only 8-25% of cases exhibit the complete triad of recurrent facial nerve palsy , relapsing orofacial edema mostly lip and a fissured tongue (7, 17).

TREATMENT

Oral prednisolone (1mg/kg/day for a week followed by a week taper) started within 1st 3-5 days results in improved outcome. Because of the recovery of HSV in neural fluid of the facial nerve , some also recommend adding oral acyclovir or valacyclovir .Alone antiviral agents are not effective in reducing adverse sequelae, but added to prednisolone may have a small additional benefit. Surgical decompression of the facial canal is not of value unless imaging provides evidence of nerve compression or an anatomic lesion. Both high and low level laser therapy have been used with good results in some cases as a form of physiotherapy .Traditional physiotherapy to facial muscles is recommended in some chronic cases with poor recovery ,but the efficacy is uncertain .Protection of cornea with an ocular lubricant is important especially at night .

CONCLUSION

The facial nerve palsy is not rare in children, but in cases recurrence , pediatricians should consider other causes and thorough investigations to rule out the secondary causes to be done. Recurrent Bell's palsy is rare. Currently the best option is medical management along with regular follow up . The recurrence rate in Bell's palsy is 6.5% and the rate of recovery is less which is about 70% compared to primary Bell's palsy where the recovery is about 95% . (3,4,19,21)

Compliance with ethical standards

Conflicts of interests - None

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