Peripheral Facial Paralysis: A Case Report In a Healthy Girl

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Disclosures

I Nuno Ferreira have no financial relationships to disclose concerning the content of this presentation or session.

Introduction

Bell's Palsy is an acute peripheral facial nerve affection, usually affecting only one side of the face. It may be diagnosed by the onset of impaired facial expression due to unilateral facial weakness of all facial nerve branches, dry eye, the inability to close or wink the eye or close the mouth, numbness or pain around the ear, temple, mastoid, or angle of the mandible. If the patient wants to smile, he appears unilaterally expressionless. Patients may also mention otalgia or mild retroauricular pain, which may even precede the palsy. Speech and eating may also be disturbed.

The etiology of Bell's palsy is unknown but viral infection, vascular ischemia, or autoimmune disease has been postulated as possible mechanisms. A familial occurrence has been reported. Increasing evidence implies that Bell's Palsy is caused by latent herpes viruses, being reactivated from cranial nerve ganglia. Reactivation of these viruses presumably causes inflammation of the facial nerve.

The incidence of Bell's Palsy is estimated to be 20-25 cases per 100,000 population annually. The peak incidence occurs between the second and fourth decade (15-45years), with an increase in pregnant women. It occurs with equal frequency on the right side and left side of the face. Simultaneous, bilateral facial palsy is extremely rare. In children, facial nerve palsy appears 2-4 times less frequent than in adults and appears to be more frequently associated with viral infection than in adults. Overall the outcome of facial nerve palsy appears more favorable in children as compared to adults.

The main goals of treatment are to speed recovery, to make recovery more complete, to prevent corneal complications and other sequelae, and to inhibit viral replication. Psychological support is also essential. Patients require regular follow-ups. Patients with Bell's palsy should be referred to a specialist and treatment should start as soon after onset as possible. Facial nerve palsy can improve up to 1 year later. Patients with incomplete palsy have a better prognosis than patients with complete palsy and the younger the patient the better the prognosis.

Case report

A 12 years-old female came to a Pediatric Dentistry appointment for a routine consult, in which the patient complained about the differential growth of her chin to the right, in this consult, it was defined to do scalling and the application of topic fluoride. Intraoral and extraoral examinations were normal for the patient's age.

After 2 weeks she returned to the next scheduled appointment where she reported pain on the posterior right side of her neck. It was verified that the right side of her face was peripherally paralyzed and that she couldn't smile, fully close her right eye or rise her right eyebrow. (Figure 1,2,3,4). She had itching of her lower eyebrow and her eye was constantly crying. This condition was reported to have begun 3 days prior to the appointment and has been progressing since.

After the examination the patient was referred to the Pediatrics urgency where she was primarily diagnosed with an idiopathic facial nerve paralysis after several neurologic exams, she was prescribed with vitamins, cortisone, artificial tears, and an anti-infective cream for her eyes to prevent infections, and instructed to sleep with a blindfold due to being unable to fully close it. Some stimulant exercises were prescribed like drinking through a straw, whistle, send kisses, and inflating balloons. And she was also prescribed to attend physiotherapy. The physicians said that the condition would return to normal and it would take from 1 week to 3 months.

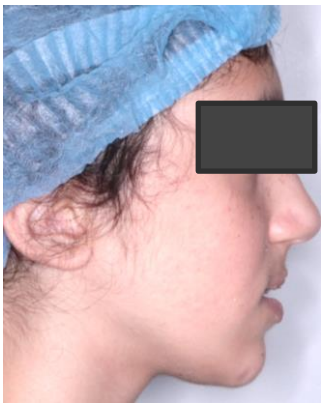

Figure 1 – Lateral Right Side photography in Smile

Figure 2 – Frontal photography in Smile

Figure 3 – Lateral Left Side photography in Smile

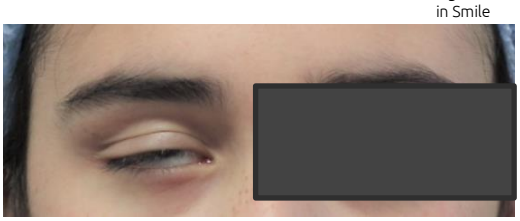

Figure 4 – Frontal photography with eyes closed

Discussion

It’s mandatory to listen to pediatric patients and try finding the origin of their complaints, even though in children's answers may need to be scrutinized for the truth, they are an important source of information.

It’s also important to collect all the patient's history from the parents so that the anamnesis can be more complete and to be easier to diagnose any illness.

In this case, the original complaint was the first sign of the nerve injury. The inability to perform certain movements and the extra-oral exam were vital. The parents were informed of the situation and the patient was medicated in 3 days, at the optimum time for the best prognosis.

Conclusion

Facial Nerve Paralysis(FNP) in children is a manifestation of a different group of causes. One of the most common etiology of Facial Nerve Paralysis is idiopathic (Bell's Palsy). There are also infective causes, and therefore to each patient, it's adapted a proper treatment.

In the majority of Bell's palsy cases, there is a favorable prognostic, depending on the age of the patient (younger patients have better prognosis), and on the time of detection (faster diagnoses have better prognosis). This disease causes significant concerns in patients, parents, and doctors, the patients lose esthetics, functionality and may spiral into depression as a consequence of the onset symptoms.

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