



IMPACT OF PHYSIOTHERAPY IN BELLS Palsy MANAGEMENT

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ABSTRACT:

Bell's palsy is a neuropathy involving the seventh cranial nerve, also known as the facial nerve. It is usually caused by traumatic, infective, inflammatory or compressive conditions on the nerve. Many cases are also with no identifiable etiologies and are classified as idiopathic. Acute inflammation and edema of the cranial nerve seven can lead to the compression and eventual ischemia. The most common viral cause of Bell's palsy is herpes simplex virus but there are several reports of other viruses such as Epstein-Barr virus, human immunodeficiency virus and the hepatitis B virus involved in with similar presentation. Presentation of Bell's palsy in common population is common During winter and this makes early recognition and proper treatment is important. Here presenting a case of a 21 year-old female with Bell's palsy.

KEYWORDS:

BELL'S Palsy, FACIAL NERVE, PHYSIOTHERAPY.

PAPER ACCEPTED DATE:

8th April 2024

PAPER PUBLISHED DATE:

15th April 2024

INTRODUCTION

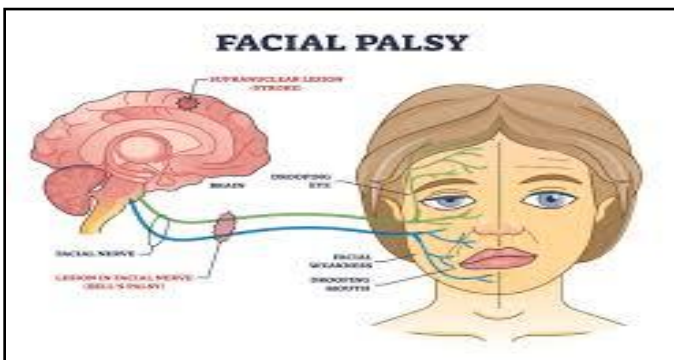
Bell's palsy is a neuropathy involving the seventh cranial nerve, also known as the facial nerve. It was first described by Dr. Charles Bell in 1821 [1]. It is usually caused by traumatic, infective, inflammatory or compressive conditions on the nerve. Many cases with no identifiable etiologies exist and are classified as idiopathic. Bell's palsy is usually unilateral and can be complete or partial. Each side Bell's palsy is a dysfunction of the facial nerve causing unilateral facial paralysis.¹ The annual incidence of Bell's palsy is 15–30 cases per 100,000 people.² Bell's palsy has shown to recover rapidly, with 85% of cases recuperate within 3 weeks can be affected equally [2]. Acute inflammation and edema of the cranial nerve seven can lead to the compression and eventual ischemia. The most common site is in the labyrinth segment [3]. The most common viral cause of Bell's palsy is herpes simplex virus (HSV) but there are several reports of other viruses such as Epstein-Barr virus [4], human immunodeficiency virus [5] and the hepatitis B virus [6] involved in with similar presentation. Presentation of Bell's palsy is quite common and this makes early recognition and proper treatment important. Here presenting a case of a 21 year-old female with Bell's palsy.

CASE PRESENTATION

- A 21year old female studying BSc allied health sciences came to the outpatient department with history of severe cold and mild fever from 2days and observed that she couldn't spit during brushing her tooth this morning and observed there is a difference in her face. Later the

physician confirmed that its left side bell's palsy her mouth deviated towards right side. The physician suggested she has to start on a course of acyclovir, vitamin B complex, prednisolone and artificial tears in the form of eye drops to keep her eyes wet. Mean while she was suggested to do Electromyography (EMG) to determine the extent of the nerve involvement and scheduled her for a follow-up after six weeks.

- As the girl is in the medical field she refused to use the medications as they end up with few side effects in later stage of life. She visited a physiotherapy department and re diagnosed the condition and started her treatment with 2times a day with Electrical stimulation(facial trunk with surged faradic and interrupted galavanic current for facial motar points),facial massage shaped taping on the affected side and regular facial exercises up to 21 days and significant recovery was seen.



DISCUSSION

Bell's palsy has traditionally been managed through a combination of physical treatments. Physical treatment options have included massages, facial exercises, biofeedback, and electrical stimulation (7) Electrical stimulation may enhance muscle and nerve function, expedite the healing process, and reduce the risk of long-term paralysis in patients with acute Bell's palsy [8]. Therefore, electrical stimulation is being explored as a physical therapy approach to improve this chronic condition; numerous preclinical and clinical studies have been performed to assess its effectiveness. For example, the continuous electrical stimulation of patients with chronic facial palsy for 6 months was reported to improve motor conduction latencies and clinical residuals, suggesting that prolonged electrical stimulation may facilitate reinnervation, potentially originating from neighboring healthy nerves, such as the fifth cranial nerve [9]. In addition, electrical stimulation-induced neuromodulation has been found to stimulate the remaining nerves, activating their inherent plasticity, which may lead to sensory and motor reorganization. The application of electrical stimulation in all facial paralysis patients primarily focuses on addressing facial weakness and preventing further damage on the affected side. Exercises will help to strengthen the specific muscles of the face and should be done 4-5 times a day in front of a mirror or as per the advice by the Physiotherapist. The mirror will also help you avoid letting the good side overcompensate by moving in an exaggerated way. Facial exercises are performed to keep your brain trained in what electrical impulses are needed to control the different muscles in your face. This will help you transition back to using your facial muscles as you recover from Bell's Palsy(10).

CONCLUSIONS

It is possible to conclude that, physiotherapy is effective in treating the bells palsy especially in the most severe cases which may carry the risk of disfiguring facial sequelae. It's benefiting the individuals with physiotherapy without any side-effects

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