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Case Report on Management of Bell's palsy in a female patient

[1]Ms. Prajakta Pramod Korde, [2]Miss. Lina Fating , [3]Roshan Umate, [4] Rupa A. Fadnavis

1] G.N.M. 3rd Year, Florence Nightingale Training College Of Nursing, Datta Meghe Institute of Medical sciences (DU) Sawangi (M) Wardha. Email: prajaktakorde999@gmail.com

2] Nursing tutor, Florence Nightingale Training College Of Nursing, Datta Meghe Institute of Medical sciences (DU) Sawangi (M) Wardha. Email: leenapahune@gmail.com

3] Research Consultant, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical sciences (DU) Sawangi (M) Wardha. Email: roshanumate111@gmail.com

4] Rupa A. Fadnavis, Dept. of Information Technology, Yeshwantrao Chavan College of Engineering, Nagpur. Email: rafatycce@gmail.com

ABSTRACT:

Background: Bell's Palsy is a type of Neuropathy that affects the 7th cranial nerve, sometimes called the Facial Nerve. The most prevalent causes of nerve damage are traumatic, infective, inflammatory, or compressive illnesses. Because there are no recognised causes, many cases are labelled as idiopathic. Acute inflammation and oedema can produce compression of the cranial nerve 7th leading to Ischemia. Although the Herpes Simplex Virus is the main cause of Bell's Palsy, other viruses like Epstein-Barr Virus, Human Immunodeficiency Virus and Hepatitis B Virus have been linked to the case with similar symptoms. Because Bell's Palsy is rare or uncommon in youngsters, early detection & treatment are essential. A 28-year-old female patient with Bell's Palsy presented. Bell's Palsy is quite uncommon in children and adults, thus early detection and treatment are critical.

The main diagnosis, therapeutic intervention and outcome: After physical examination and investigation doctor diagnosed a case of Bell's Palsy with a patient who was treated antiviral drug acyclovir and was also given corticosteroid drug (Prednisolone) to help reduce the inflammation.

Nursing perspectives: Administration fluid replacement, monitor vital signs, maintain temperature chart, maintain intake output chart, proper medication is given as per doctor order and proper nursing care is given.

Conclusion: The patient was admitted in A.V.B.R.H with a chief complaint of she had to fever for 12 days followed by weakness of the left half of the face difficulty in chewing food excessive tearing of the eye, etc. The patient took all treatment with proper medication.

Keywords: Herpes Simplex; corticosteroid; cross facial nerve graft; facial nerve palsy; Bell's palsy; facial nerve paralysis.

Introduction:-

The Facial Nerve, also known as the 7th Cranial Nerve, is affected by Bell's Palsy, a neuropathy. In 1821, The first person was to mention it, was Dr Charles Bell.[1] The most prevalent causes of nerve damage are traumatic, infective, inflammatory, or compressive illnesses. Idiopathic refers to a category of conditions for which there is no known aetiology.[2] Bell's Palsy is a Unilateral condition that might be partial or/and complete. Each side has the potential to be equally affected. [3] Acute Inflammation & oedema can produce compression of the cranial nerve seven, leading to ischemia. The most common place is the labyrinth portion. [4] Although the herpes simplex virus (HSV) is the most common viral cause of Bell's palsy, other viruses such as the Epstein-Barr virus, human immunodeficiency virus (HIV), and hepatitis B virus (HBV)

have been linked to similar symptoms. Because Bell's palsy is so rare in children, early detection and treatment are essential. [5] We describe the case of a 28-year-old woman who has Bell's palsy. Bell's palsy is defined by an instantaneous, unilateral, partial or entire facial paralysis followed by slight pain, numbness, increased sensitivity to sound, and a change in taste.[6] Although reactivation of herpes viruses from the cranial nerve ganglia may have a role, Bell's palsy remains idiopathic. Bell's palsy is most common in adults aged 15 to 40, affecting one in every 60 people at some point in their lives. The majority of people recover on their own within a month, while up to 30% have a delayed or incomplete recovery.[7] Bell's palsy is a type of acute peripheral facial nerve palsy induced by an unknown aetiology. It's usually one-sided and can be complete or partial. [8] Although the definition is agreed upon, there is no consensus on the disorder's genesis, diagnosis procedure, or treatments. Bell's palsy is a disorder that affects both sides of the face and is usually unilateral. Bell's palsy's pathophysiology is still unknown. Acute facial nerve inflammation and oedoema are thought to entrap the nerve in the bone canal (especially in the labyrinthine segment), causing compression and ischemia. [9] An inflammatory response surrounds the nerve fibres. Many viruses, including HIV8, Epstein-Barr virus9, and hepatitis B virus, have been associated with the onset of chronic inflammation, but herpes simplex virus (HSV) is the most frequently implicated. Bell's palsy is gradually being connected to 12HSV, and the condition could be reclassified as an HSV mononeuritis of the facial nerve in the future, albeit this does not rule out other causes or the role of entrapment in nerve degeneration. HSV reactivates and replicates in the geniculate ganglion cells causing inflammation in the graniculate ganglion and labyrinthine section of the social nerve, according to one Idea.[10]

Patient Information:-

Patient-specific Information:-

A 28-year-old female was admitted to A.V.B.R. Hospital on dated 20 /05/2021 with a chief complaint of fever for 14 days followed by weakness of the left half of the face 2 days after the subsidence of fever. She had difficulty chewing food. Dribbling of saliva and running tears from eyes, headache, difficulty in speech. h/o pain in the ear. The patient has no ear discharge, not a diabetic.

Medical history:

On May 20th,2021, a patient admitted to A.V.B.R. with a chief complaint of fever. Weakness of left half of the face 2 days after the subsidence of fever. She had difficulty chewing. Dribbling of saliva and running tears from eyes. She had pain in the ear, problem in smiling and making Facial expressions. The present case had no medical h/o hypertension, diabetes mellitus, tuberculosis , etc. The present case had Bell’s palsy

Family history and psychosocial history:-

In family history, she is belongs to a nuclear family and her husband had medical history i.e. DM. She mentally stable, conscious and oriented. She was maintaining a good relationship with doctors and nurses as well as other patients also.

Clinical Findings:-

Physical examination:

The present case was unhealthy. She was conscious and oriented to date, time & place. She was not maintained good personal hygiene. Her blood pressure 130/ 80. mmHg. pulse rate was normal.

On examination PT was no wrinkles on the forehead, unable to close her eyes, whistle, blow out, mouth deviated to the left side, could not put out platysma on left side

Important clinical findings:

Blood investigation:-

Hb% -8.5 g/dl,Total RBC Count -4.34 ml/cmm , Total WBC count 8200/cumm,Total platelets count 2.37 /cumm . Granulocytes- 60 ,monocytes 03 % ,RBS- Glucose plasma Random-112mg/dl etc

Prognosis:-

Bell's Palsy has a usually positive prognosis. Around 70% of persons will completely recover without the need for treatment. There is some evidence that treatment with steroid medication within seven days of symptom onset promotes recovery. Age, gender, palsy side, and comorbidities such as diabetes mellitus or hypertension do not appear to affect Bell's Palsy prognosis or recovery outcomes. However, research in this field is scarce and of poor quality. This made confidently presenting a diagnosis to Mrs S difficult.

Timeline: She sought treatment at A. V. B. R. H. and received proper care. He is currently in terrific health after taking the correct medicines.

Therapeutic intervention:- Present case took the medical management with Bell’s palsy corticosteroid (prednisolone), antiviral drug (acyclovir), Analgesic drug Tylenol (acetaminophen) etc.

Discussion:

The present case of Bell’s palsy. This present case was admitted to A.V.B.R Hospital on dated 20 /05/2021 with a chief complaint of fever since 14 days followed by weakness of left half of the face 2 days after the subsidence of fever. She had difficulty chewing food. Dribbling of saliva and running tears from eyes. h/o pain in the ear, the patient has no ear discharge, not a diabetic. Symptoms nearly always affect only one side of the face. After physical examination and investigation doctor diagnosed acute complete LMN Facial palsy .[11]

The patient's response to acyclovir confirmed the diagnosis of viral Bell's palsy. Multiple disorders, including Ramsay Hunt Syndrome, malignancies, Lyme disease, and Sarcoidosis, were considered in the differential diagnosis and ruled out. Because most doctors base their diagnoses on clinical signs and symptoms, it's critical to rule out any other possible causes. Flu-like symptoms, an Erythema migrans rash that appears like a "bulls-eye," and a Lyme antibody titre that can rule out the disease are all signs of Lyme disease. Invasive procedures like lumbar puncture are usually avoided, but in extreme cases, they might be considered. Magnetic resonance imaging (MRI) and computed tomography (CT) can be used to locate any tumour (CT). [12]Antibody titres for IgG and IgM were not available at the centre to confirm our patient's diagnosis of Bell's palsy. The treating doctor made his diagnosis and prescribed treatment based on the

patient's clinical signs and symptoms. The child's health was also closely monitored, and his parents were instructed to transport him to the hospital if he showed any signs or symptoms of his condition deteriorating. [13]Our patient's Bell's palsy was treated with the antiviral acyclovir. [14] Prednisolone was also prescribed to help with the inflammation, as well as artificial tears to keep his eyes moist and prevent keratitis. During his recovery, we also urged his parents to keep him away from any harmful gases or dust. While there are many different perspectives on the use of prednisolone in combination with acyclovir, the patient tolerated the medication well. Adults are more susceptible to the side effects of prednisolone, thus the dose should be kept low and taken off slowly. However, high-quality information is a scarce, making establishing Bell's Palsy treatment regimens problematic. Many studies investigating physical therapy as a treatment for Bell's Palsy have small sample sizes, short research periods, or a high risk of bias in the study design.[15] Furthermore, assessing the effectiveness of any intervention for Bell's Palsy is particularly challenging because 70% of patients heal without treatment. More high-quality RTCs and systematic reviews are needed to help health care practitioners establish evidence-based treatment methods for Bell's Palsy patients. Furthermore, assessing the effectiveness of any intervention for Bell's Palsy is particularly challenging because 70% of patients heal without treatment. More high-quality RTCs and systematic reviews are needed to help health care practitioners establish evidence-based treatment methods for Bell's Palsy patients. According to moderate to high-quality evidence, corticosteroids are an effective treatment for facial nerve paralysis.[16-18]. Cases on cerebral palsy ere also reported [19-20.] Although physical therapists are not allowed to prescribe drugs, they must be aware of this so that patients with Bell's Palsy can be sent to the appropriate specialists.

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