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Management of patient with Multiple sclerosis: A Case Report

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Abstract :-

BACKGROUND: Multiple sclerosis (MS) is an autoimmune disease that involves demyelination in the central nervous system, as well as axonal damage and loss. The patient has upper extremity weakness, poor upper extremity coordination, tiredness, a lack of agility and poor balance. These clinical characteristics have resulted in diminished engagement in her hobbies as well as decreased work productivity, which has had a significant influence on her physical and mental health. Balance, coordination, and dexterity training, as well as self-management training are among the proposed solutions. **THE MAIN DIAGNOSIS,THERAPEUTIC INTERVENTION AND OUTCOME :** After physical examination and investigation doctor diagnosed as a case of multiple sclerosis. Patient was treated analgesics drug to reduce pain.antipyretic drugs gives to reduce fever. **THERAPEUTIC INTERVENTION:-** Present case took the medical management with multiple sclerosis, antipyretics given such Tab. Paracetamol 500 mg (BD), Inj. Ceftriaxone 1gm IV (BD), Inj. Pantaprozole 40 Mg iv (OD), Inj. Ondesetron 4MG iv (TDS) for 7 days. **OUTCOME:** Patient had taken medications as per doctor order such as paracetamol to reduce their fever. And also patient condition was good with the medical treatment. Now patient's symptoms reduced and he had in better condition. **NURSING PERSPECTIVES:-** Administered fluid replacement ie. DNS and RL. Monitor vital signs and Check BP per hourly. Maintained intake and output chart and provided adequate rest and sleep to the patient. Administered medications according to doctor's order. Hydrotherapy given because patient had fever. **CONCLUSION:** There has already been a lot of research done on mild to moderate Multiple Sclerosis, but there isn't much on severe cases. As a result, future research on severe Multiple Sclerosis should focus on intervention-based trials.

KEYWORDS: Dengue hemorrhagic fever, dengue fever, and breakbone fever are all names for dengue hemorrhagic fever.

INTRODUCTION:

Multiple sclerosis (MS) is an autoimmune disease that involves demyelination in the central nervous system, as well as axonal damage and loss [1].White matter lesions, also known as plaques, form as a result of the damage to the central nervous system and are responsible for the patients' symptoms. These are several categories of MS depending on the frequency of relapses or advancement Relapsing Remitting Multiple Sclerosis (RRMS) is the most common type, in which the patient experiences new symptoms or worsening of old symptoms, followed by full or near-complete recovery[1].Secondary Progressive Multiple Sclerosis (SPMS) is a progressive form of RRMS that affects the majority of patients [1] . About

15% of MS patients have Primary Progressive MS (PPMS), which means their symptoms have worsened over time [1].

There are some interesting cases reported in literature. A 27-year-old woman with Relapsing Remitting Multiple Sclerosis (RRMS) was diagnosed two years ago. In April of 2017, the patient initially observed symptoms Visual loss in one eye, facial paralysis, numbness, and difficulty speaking lasted for 24 hours (dysarthria). After the symptoms persisted, the woman consulted her family doctor, who advised her to undergo further tests. The patient underwent magnetic resonance imaging (MRI), which indicated a lesion in the brainstem. As a result of these findings, Clinically Isolated Syndrome [2] has been diagnosed in the patient. When a first incidence results in a clinical presentation of symptoms and an MRI reveals lesions, it's time to seek medical help.a patient is defined as having Clinically Isolated Syndrome.[2]. The patient didn't start experiencing substantial fatigue and balance concerns until three months after the initial MRI, which could have been caused by lower extremity weakening. A second MRI revealed another lesion in the right hemisphere of the patient's brain. Relapsing Remitting Multiple Sclerosis (RRMS) was officially diagnosed in the patient (RRMS) after experiencing a return of symptoms [3]. The patient has been diagnosed for two years and has chosen to attend physiotherapy to help her manage her fatigue, lower limb weakness, coordination, and overall fitness. The purpose of this fake case study is to portray the patients' MS symptoms (fatigue, balance, and lower-limb weakness), as well as their response to physical therapy treatment. Similar cases of moderate to severe MS accompanied by fatigue and weakness improved markedly following physical therapy [4]. Both strength and endurance training reduce fatigue in general; however, research on which training modality provides the most effect is missing [4]. Despite the fact that specific balance exercises are required for MS patients, research reveals that gradual aerobic and resistance workouts enhance balance in those with mild to moderate symptoms. [5] ,

PATIENT INFORMATION : Information Regarding the Patient: A 28-year-old man was admitted to the A. V. B. R. H. On 02-6-21, with the major symptom of exhaustion, weakness (mostly in the lower limbs), trouble walking, poor balance and coordination, fever, headache, chills, myalgias and arthalgias, the doctor diagnosed a case of multiple sclerosis**.**

Medical history: A patient was admitted to the A. V. B. R. hospital on June 2nd, 2021. Since three years, the patient has a history of regular alcohol intake and dengue fever. Five days before admission, he experienced a fever, headache, chills, myalgia, and arthalgia, and he took acetaminophen at regular intervals on his own**.** He had widespread stomach discomfort, frequent vomiting, hematemesis, epistaxis, and diarrhoea on the fourth day of symptoms, after his fever and headache had subsided**.** Present case had history of multiple sclerosis.

Family History :-He belongs to nuclear family. In patient’s family there is no any hereditary history like DM, Asthma, Hypertension etc.

Psycho-social History :-He was mentally stable, concious and oriented to date time and place. He had maintain good relationship with doctors and nurses as well as other patients also.

Clinical Finding :-

Physical examination :-The patient was awake and aware of his or her surroundings, including the time, date, and place. His physical appearance was ordinary, and he kept himself tidy. For the past three days. He has been experiencing broad discomfort and a high fever (the maximum temperature recorded was 39•4 °C). He was verified to be cognizant (Glasgow Coma Scale 15) on physical examination, with a pulse of 100 beats per minute and a blood pressure of 100/60 mmHg. - 20 breaths per minute breathing rate There was no visible rash or bleeding. No abnormalities were found on other general and systemic tests. Dengue fever was diagnosed upon admission**. Important clinical findings:**-Blood Investigation: WBC:- <5000 cells/mm3. RBC :- 20,000-40,000 (cells/mcL),IgM and IgG test :- Positive, Platelet count:- 12,000 cells/mm^3

Timeline :-He took treatment in A. V. B. R. H. and he got the proper treatment. Taking proper medication and now he has been good condition .

Therapeutic interventions :- Present case took the medical management with dengue fever , antipyretics given such Tab. Paracetamol 500 mg (BD),Inj. Ceftriaxone 1gm IV (BD), Inj. Pantaprozole 40 Mg iv (OD), Inj. Ondesetron 4MG iv (TDS).

Nursing perspectives :- Administration fluid replacement ie.DNS and RL monitor vital sign per hourly Maintained temperature chart 2 hourly strictly ,maintained intake output chart properly Tab. Paracetamol antibiotics given as per doctor order.

Discussion :-

The patient in this case was admitted to the hospital with the major complaint of weariness, weakness (mostly in the lower limbs), trouble walking, decreased balance and coordination.[6] fever, headache, chills, myalgiaandarthalgia . After physical examination and investigation doctor diagnosed this case as dengue fever . He took treatment of multiple sclerosis and antipyretic drug . Patient condition was stable, fever was reduced ie. 37°C and also platelet count was at normal level ie. 250,000 cells/mm^3.[7-8]

According to a case reported by Fernando S, et. al. [9] a young man who suffered from Relapsing Remitting Multiple Sclerosis (RRMS), the patient sought physiotherapy treatment after her most recent episode left her with symptoms of exhaustion, lower extremity weakness, lack of coordination, and balance.Using objective measurements, the physiotherapists dealing with this patient were able to develop goals based on their findings and, eventually, a therapy plan. One of the most debilitating symptoms of MS is fatigue, which has a substantial influence on a patient's quality of life. Incorporating aerobic and weight-bearing exercise, as well as Thai Chi, into treatment is crucial. Additionally, these interventions have a positive secondary effect on coordination, balance, and depression[10].Because MS is a progressive disease, patients must be educated on both self-management strategies such as energy conservation and the importance of keeping a low core temperature to slow disease progression [11]. Additionally, being aware that you have a progressing condition can be extremely exhausting. As a result, It is crucial to include SCT with an emphasis on goal formation, result expectations, and self-efficacy [12]. The implications of this case show that several types of exercise training can improve In those with mild to moderate depression, quality of life, weariness, and strength are all factors to consider. Multiple Sclerosis (RRMS) is a type of relapsing-remitting disease [4]. A number of related studies were reviewed [13-18].

CONCLUSION: There has already been a lot of research done on mild to moderate Multiple Sclerosis, but there isn't much on severe cases. As a result, future research on severe Multiple Sclerosis should focus on intervention-based trials.

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