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Multiple sclerosis a patient of 35 years old woman from Abbottabad visited to Ayub medical complex had long term neurologic complaints

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Abstract
Multiple sclerosis (MS) is a chronic autoimmune disease that targets myelinated axons in the central nervous system. Headache has been reported as a subtle symptom of the onset of MS, with a variable frequency of 1.6–28.5%; however, it remains unclear whether headache is a true symptom of MS onset. Here, we report the case of a female patient who had a history of migraine without aura and experienced worsening of migraine-headache symptoms as the initial manifestation of MS. Three similar cases were reported previously; however, unlike this case, those cases had no history of migraine without aura. In our case, we excluded factors that could trigger migraine attacks, such as changes in weather, drugs, alcohol, caffeine withdrawal, stress, fatigue, lack of sleep, hormonal therapy, diet, and hunger. The patient had one episode of MS attack with the simultaneous presence of asymptomatic gadolinium-enhancing and non-enhancing lesions, including hyperintense lesions in the bilateral periventricular white matter, body of the corpus callosum, and periaqueductal grey matter, as observed on the T2-weighted images obtained at the first brain magnetic resonance imaging. In addition, after the injection of gadolinium contrast, ring enhancement over these lesions was noted in T1-weighted images, which was suggestive of active demyelination. MS was diagnosed according to the McDonald criteria (2010 revision). Hence it is concluded that MS with periaqueductal grey matter involvement may present with worsening migraine. It is important to be cautious if any secondary causes exist, especially when the patient has a history of migraine without aura. MS should be one of the differential diagnoses in young women showing a change in headache pattern or poor clinical drug response to migraine treatment accompanied by episodes of focal neurological deficit. Failure to recognize MS may lead to inappropriate treatment and worse prognosis.

Keywords: Multiple sclerosis, neurologic complaints

Abbreviations: MS: multiple sclerosis; CNS: central nervous system; ATH: Ayub teaching hospital; MRI: magnetic resonance imaging; CSF: cerebrospinal fluid; FDA: food and drug administration.

Introduction
Multiple sclerosis (MS) is a prolonged autoimmune disease that affects the myelinated axons in the central nervous system (CNS) [1]. This disease affects women more frequently than men. The estimated female to male ratio of MS incidence increased from 1.4 in 1955 to 2.3 2000 according to a systematic review of 28 epidemiologic studies [2]. The average age of onset of MS is 30 years, and the disease starts approximately five years earlier in women than it does in men [3]. MS symptoms at presentation vary individually and are unpredictable [4]. Headache is not generally regarded as a symptom of MS, although it occurs in more than half of the cases of MS. Whether headache is a symptom of MS onset remains an open question [5]. Recently we found a woman with MS as diagnosed in 2010 revisions of the McDonald criteria whose initial presentation was worsening migraine [6].

Case History
It would not be quite an easy job for one to make a proper diagnosis such patient needs more attention than a casual patient.

A case of 35-year-old female came to neurologist of in Ayub Teaching Hospital (ATH) Abbottabad. The patient had long term neurologic complaints. The patient relates that for many years she had noticed that some significant changes in neurological functions, major findings are lower extremity weakness, heat intolerance participating in stumbling gait and a tendency to Two years ago person was working very hard and under a lot of stress, she got sick with flu and her neurological were seemed. She has several bad falls. Since time she had noted arthralgia on the right and afterward on the left side of the body. Then the patient abruptly developed a right hemi sensory deficient after several days of work she was alert concerned with and had no difficulty with recall language, attention, and concentration were normal. Heart rate was normal regular. There were no carotid bruits. Peripheral vascular system was unmark able. Cranial nerve abnormalities included questionable right afferent papillary defect, although both pupils reacted minimally. The fundi were pale bilaterally. Visual acuity was 20 by 20 of with distance screening. Remaining cranial nerves were unremarkable. Strength is decreased in the right lower margin graded 4 at right hip flexors 4 at the right knee flexors 5 at the knee extensors and dorsiflexes. Reflexes are graded 2 in the upper extremity and 3 at the patellar, she has unsustained clonus at the left. The plantar responses are extensor bilaterally. She has mild dysmetria with finger to nose right more so that left. There is a mild difficulty in the lower extremity, although she is able to perform the task. Joint position is slightly decreased on the left. She can't detect vibration at all in the left lower extremity and it is decreased in the right. She also has decreased vibration sense in the upper extremities.

Etiology

The risk of developing Multiple Sclerosis is under the combined influence of environmental and endogenous influences as displayed by epidemiological and genetic studies. Immunological abnormalities are a salient feature of the disease but their myelin toxic effect is still to be demonstrated. The pathogenesis of the disease remains unknown. The auto immune theory and the contagious theory are debatable but they may also be both valid. Multiple sclerosis could be a post infectious auto immune disease final common way of common childhood infections. Anyway, no infectious agent is demonstrable inside the central nervous system at the overt disease stage. Occur as a result of combination of genetic and environmental factor and although some are partially modifiable.

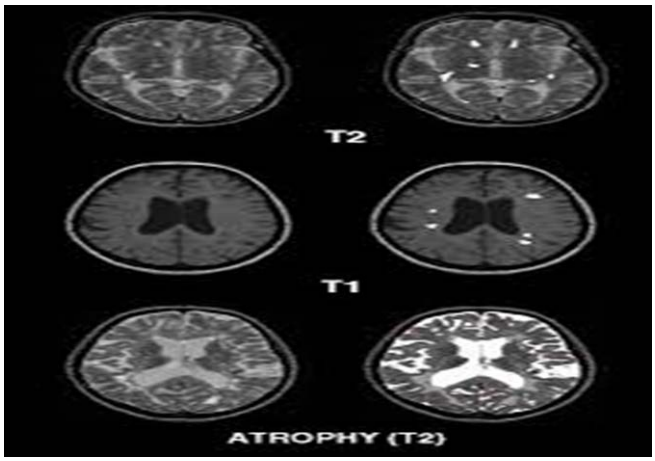
Diagnosis and Observation

Her magnetic resonance image (MRI) scan was completed at that time and reveals some multifocal white matter diseases, areas of increased T2 in both hemispheres and spinal tap was also done which revealed the presence of oligoclonal bands in cerebrospinal fluid CSF. There were 28 total nucleated cells which were increased from unusual amount. Visual evoked response testing was abnormal with showed transmission in optic nerves. Later on the patient got multiple problems related to her disease; she had weakened urinary bladder function which required multiple voids in the morning and Nocturia three times. She also has persisted antbalance problem with some sensations of spinning and she is extremely the cause of MS is unknown. However, it is believed to fatigue. Abnormal MRI scans are found in:

90% of patients with definite diagnosis of MS;
70% of patients with diagnosis of probable MS;
30%-50% of patients with possible MS

There are three criteria for the MRI diagnosis of MS

Lesions abutting the lateral ventricles
Lesions with diameter greater than 0.6 cm
Lesions present in the posterior fossa [7].



Material and Methods

Diagnosis

Treatments

She currently takes betaseron and Nortriptyline for bladder control and prednisone 10mg she also takes calcium 1200 mg per day vitamin C 1000mg per day and Tylenol 500 mg on an alternate day basis. Betaseron Nortriptyline is long time affected. Patient is on stable condition now. Corticosteroids such as oral prednisone and circulatory methylprednisolone are prescribed to reduce nerve tenderness. Side effects may include insomnia, increased blood pressure, mood swings and fluid retention. Increase weight of patient, The Food and Drug Administration (FDA) has approved eight medications for relapsing–remitting MS and all have been shown to reduce the number of relapses (attacks or exacerbations). The number of new lesions (plaques) on MRI brain scans. Five injectable four beta interferons (Avonex, Betaseron, Extavia, and Rebif) and the copolymer polypeptide mixture glatiramer acetate are generally viewed as first-line treatments for MS. Most specialists recommend that treatment start with one of above mentioned drugs as well as the diagnosis of relapsing remitting MS has been confirmed and some Second-line therapies includes natalizumab and mitoxantrone (Novantrone).

Discussion

Multiple sclerosis is a central nervous system disorder that results in abnormalities over time and space. In most instances the first symptoms and signs indicate a lesion in the optic nerve brain stem or spinal cord. Not all patients with these symptoms however some have conditions that progress to clinically definite multiple sclerosis. This case report study we have shadowed a patient came to neurology department in Ayub teaching hospital Abbottabad Pakistan. MS symptoms typically start with optic nerve spinal cord or brainstem scratches with cognitive and mood disorders as late presentations and few reports of psychiatric disorders in MS patients [8]. Many people with MS lose muscular strength in the arms and legs as the disease progresses. The loss can range from reduced dexterity to paralysis of an arm or leg (www.nmss.org). Other symptoms include a sensation of electricity with forward deck flexion. Lhermitte,s phenomena bladder hesitancy and over the past six to seven days peri and

retro orbital left eye pain with decreased visual acuity in left eye. Then the MRI scan showed multiple areas consistent with demyelination and the visual evoked responses showed delayed P100, s bilaterally. Patient is suffering mild ataxia gait with diminished ability to tandem walk in addition of slight scissor movement with normal walking. There are a few clinical characteristics of MS in children, they include acute onset of headache, nausea, vomiting, fever, seizures, altered state of consciousness, motor sensory hemi-syndromes, cerebellar and brain stem dysfunction. Some people's MS symptoms develop and increase steadily over time, while for others, they come and go periodically. These periods when symptoms get worse are known as relapses although there is no known cure for M.S. Several therapies have proven helpful. The primary aims of the therapy are returning function after an attack preventing new attacks and preventing disability. Medical treatment medication used in the treatment of M.S which has several adverse effects and the most common alternative conditions. Mimic MS may be the most difficult to eliminate in differential diagnosis about 30% of patients with typical isolated CNS syndrome indicating of demyelination have completely normal MRI apart from the characteristic lesion(s) [9]. The sympathy of all the MR standards should improve by using a 3 millimeter section thickness and a mixture of fast spin resonance and fast fluid attenuated inversion recovery sequences and the treatment of patients with MS changed completely when in the 1990s modern first line agents were accepted by the US Food and Drug Administration (FDA IFNs and glatiramer acetate) [10]. According to Markowitz this raised the bar on the definition of effective treatment. Patient takes betaseron Nortriptyline which shows very good results she is normally doing her work. The concept of neuroprotection is poorly understood [3]. If the neurodegenerative processes of demyelination and axonal weakening can be slowed or prevented it may be possible to delay development and avoid disability reaching a diagnosis [11]. However, the lack of accurate prevalence data for many alternative diagnoses relative to MS currently makes it difficult to weight diagnoses based on prevalence.

Conclusion and Recommendations

It is important that your doctor check your progress at regular intervals to make sure that this medicine is working properly and to check for unwanted effects, while being treated with this medicine and during the period following treatment, do not have any immunization vaccination with live virus.

References

1. Calabresi PA. Diagnosis and management of multiple sclerosis. Am Fam Physician, 2004; 70:35-44.
2. Alonso A, Hernán MA. Temporal trends in the incidence of multiple sclerosis: a systematic review. Neurology. 2008; 71:129.
3. Olek MJ. Epidemiology, risk factors and clinical features of multiple sclerosis in adults, 2011.
4. Goldenberg MM. Multiple sclerosis review. 2012; 37:175-184. http://www.nationalmssociety.org/
5. Mantia L Headache. and multiple sclerosis: clinical and therapeutic correlations. Neurol Sci, 2009; 30:23-26.
6. Polman CH, Reingold SC, Banwell B, Clanet M, Cohen JA, Filippi M *et al*. Ann Neurol. Pub Med., 2011; 69(2):292-302.
7. Sandberg WM, Thompson AJ, Waubant E, Weinshenker B, Wolinsky J. Sclerosis, Lancet. Pub Med., 2004; 364:2106-2112.
8. Messina S, Patti F. Gray matter in multiple sclerosis: cognitive impairment and structural MRI. Mult Scler Int. 2014, 609-694.
9. Matsuoka T, Matsushita T, Kawano Kawano Y, Osoegawa M, Ochi H, Ishizu T et al. Heterogeneity of aquaporin-4 autoimmunity and spinal cord lesions in multiple sclerosis in Japanese. Brain. PubMed. 2007; 130:1206-1223.
10. Filippi M, Van-Waesberghe JH, Horsfield MA. Interscanner variation in brain MRI lesion load measurements in MS implications for clinical trials. Neurology. 1997; 49:371-3773.
11. Katz Sand IB, Krieger S. Emerging strategies for the treatment of multiple sclerosis. Future Neurol. 2012; 7:193-207.