Multiple sclerosis masquerade

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Introduction

THIS case report aims to inform general practitioners (GPs) about the psychiatric symptoms that multiple sclerosis (MS) can present with, its co-morbidity with other syndromes, and those psychiatric syndromes that can masquerade as MS.

MS is a major cause of neurological disability among the middle-aged and is an important condition cared for in general practice. Among the physical symptoms seen are fatigue, focal neurological deficits and both sexual and sphincter dysfunction. It is also recognised that psychiatric symptoms play a role in the disease course. These may be owing to the direct effects of demyelination, the emotional reaction to this illness, a poor adjustment to chronic illness or the use of steroids. Transient mood changes, such as anxiety and irritability, are experienced by two-thirds of patients in any year, while major depressive criteria are met in one-third of patients. Other mood disturbances less commonly seen are euphoria, mania, and pathological laughing or crying.

Sequence of events

A 31-year-old woman worked as a bank employee and was married with no children. She was referred by her GP to psychiatric outpatients in 1998 with complaints of low mood, emotional problems, polyarthralgia, and a diagnosis of MS. She had first presented with visual disturbances in 1990 and recalled suffering from a low mood, fatigue, and irritability. Her MS was diagnosed four years later when she suffered a loss of vision with a subsequent relapsing–remitting course. A magnetic resonance imaging (MRI) scan indicated a bilateral diffuse area of high signal in both cerebral hemispheres with no brain stem, ventricular or spinal involvement. She was treated with steroids until 1995. By then, her symptoms were dizzy episodes, profound fatigue, brief urinary incontinence, visual disturbance, forgetfulness, low mood, and polyarthralgia. She was able to return to part-time work while her husband became a part-time worker to help support her. When seen in the outpatients department, she had low mood, anergia, with loss of motivation and interest, together with sleep disturbance and anhedonia. There was a history of antidepressant use since 1990 but poor compliance. Both her mother and sister suffered with depression. Her personal history indicated a conflictual relationship with her mother,

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Submitted: 10 May 1999; Editor's response: 18 September 1999; final acceptance: 15 November 2000.

©British Journal of General Practice, 2001, 51, 466-467.

whom she disliked. Owing to her mother's illness in her childhood she had taken on the maternal role (as the oldest sibling), sacrificing her own education and career opportunities as a result. A rheumatologist had found no organic arthropathy, while a period of inpatient occupational assessment found no objective cause for her muscle weakness or polyarthralgia. Her mental state revealed tearfulness, no suicidal ideation, and a marked preoccupation with her mother while appearing unconcerned about her MS. A psychiatric formulation is shown in Table 1.

Diagnosis

The diagnosis of a major recurrent depression co-morbid with MS is most likely (Table 1). Her symptoms of polyarthralgia may be explained as secondary dissociation conversion in the context of major depression. MS may have caused her to decompensate psychologically, leading to psychiatric morbidity.

A psychodynamic explanation is that her unconscious conflict with her mother manifested through her development of depression and later conversion symptoms, specifically polyarthralgia. The secondary gain was of her acquiring a 'sick role', which led to her husband becoming a caregiver. Paradoxically, she identified with her mother, allowing aggression directed towards her mother to then be directed at herself: 'I hate my mother, I hate myself'. The result is a depressive illness with somatic complaints that leaves her husband in the role that she was subservient to when a child.

Masquerade

The masquerading symptoms of fatigue, depression with anergia, cognitive impairment, and somatisation can be analysed. Her history of anergia, while characteristic of major depression, is also seen in chronic fatigue syndrome and MS. Fatigue is associated with MS,² is independent of the neurological deficits, and does not correlate well with depression. Attempts have been made to distinguish between chronic fatigue syndrome and MS using the Abnormal Illness Behaviour Questionnaire. Trigwell *et al*³ looked carefully at the subscales that should have been discriminating, namely hypochondriasis and disease conviction, and found equally high scores between the two conditions

The association between depression and MS has been described and it seems that organic and psychosocial factors are important. The degree of disability is not closely correlated, while plaque lesions in the temporal lobe are.⁴ Minden and Schiffer⁵ found that MS patients suffer more depression than the general population (40%) and patients with non-CNS-disabling chronic disorders.

Feinstein's follow-up study⁶ found robust correlations between MS patients and their perceived level of stress and

Table 1. Psychiatric formulation.

Differential diagnosis	ICD10	Discriminating features
Organic brain syndrome	Mood disorder	There is evidence of organic disease which affects the CNS and a temporal relationship between her MS and the development of mood change (her thyroid function tests were normal). MRI indicates diffuse plaque formation in the hemispheres.
	Emotional lability	These rapid changes of mood include euphoria, depression, and irritability with impulsivity. Her clinical presentation did not appear to fit.
latrogenic	Drug induced	The use of steroids post-dates the onset of her depression and stopped long before she developed polyarthralgia.
Affective disorder	Recurrent depression	Episodes of low mood, anhedonia, insomnia, and poor memory with loss of interest and fatigue since 1990.
	Atypical depression	Somatisation, with polyarthralgia, tension and worry. The absence of hypersomnia, weight gain, and anxiety makes this unlikely.
Neurotic disorder	Dissociation conversion	Her polyarthralgia may reflect a conversion process owing to unresolved emotional conflict and secondary gain. La belle indifference is seen.
	Neurasthenia (chronic fatigue syndrome)	There is persistent physical and mental fatigue on effort with reduced performance in all spheres of life. The presence of MS by definition rules this diagnosis out.

social support. There was little relationship between plaque lesions and psychiatric morbidity and he thought that this might reflect the dynamic fluctuating nature of plaque distribution.

It appears that depression does not occur immediately at the onset of a demyelinating disease.1 A cohort studied after onset of optic neuritis found only large depression scores on the Hamilton Anxiety and Depression in the subgroup with chronic progressive disease, in comparison with the optic neuritis group alone.

Memory disturbance and cognitive change is found in 50% of MS patients. Neuropsychological tests yield an accurate estimate7 while brief screening with the Mini Mental State Examination is less sensitive. Cognitive decline is well correlated with brain pathology,6 unlike fatigue or depression.

Psychological disturbance can manifest with physical symptoms and present similarly to MS. The concept of somatisation was studied by Slater et al.8 In his classic study, following up hysterical patients over nine years, he found that one-third of the patients later developed organic brain disease. Somatisation and organic brain syndromes can co-exist, as reported by Brain in the 1930s9, and confirmed by Creed in 1990.10 Out of 133 neurological admissions he found that one-third fell between two extremes of a clear organic disorder or somatisation, with a complex picture between the two.

Discussion

The patient received adequate treatment with a selective serotonin re-uptake inhibitor; as her mood improved, so did her polyarthralgia. She continued to receive supportive psychotherapy and her memory disturbance was formally assessed. No cognitive abnormalities were detected and it was attributed to her depression with impaired concentration. She was later referred for formal psychodynamic psychotherapy to deal with her emotional problems.

The lessons that can be learnt are that major depression is common in MS. It acts as an added vulnerability factor to both external and internal stressors. The symptoms of MS may overlap with other psychiatric symptoms, such as fatigue. In this scenario it is helpful to gain multiple perspectives, either from carers, other specialists, occupational therapists or physiotherapists, and to enlist the advice of a psychiatrist at an early stage to disentangle the aetiological factors that may aid recognition of a psychiatric disorder. General practitioners are best placed to do this in their referral decisions, while keeping in mind that patients presenting with fatigue alone might be clinically depressed or even have early evidence of MS.

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