

Multiple Sclerosis - advice for primary care

Dept Clinical Neurosciences, NHS Lothian. Feb 2021.

Multiple Sclerosis (MS)

MS is an inflammatory disease affecting the central nervous system (i.e. brain and spinal cord). It's the commonest non-traumatic disabling condition to affect young adults in the developed world. The cause remains uncertain, but a number of associations are known including female sex (3:1), cigarette smoking, genetic influences, previous Epstein Barr infection and low vitamin D levels. The annual incidence is about 7/100 000, so GPs will rarely see new cases in their career.

Most (90%) of MS present with a relapsing remitting syndrome (RRMS); the remainder present with a gradually progressive clinical syndrome (Primary progressive MS). Before the era of disease modifying therapies, about two thirds of people with RRMS would enter the secondary progressive stage 10 to 15 years after their first symptoms. MS presenting for the first time before the age of 15 or after 50 is recognised but unusual.

We receive many referrals from primary care where MS features high on the differential for both GPs and patients. This advice sheet is to help GPs identify which symptoms are more likely to represent the first presentation of MS.

What are the characteristics of an MS relapse including first ever event?

Clinical MS inflammation (i.e. relapse) typically presents with a specific focal symptom evolving over hours to days (rarely **sudden onset** 'stroke-like'), persisting for days to weeks, then gradually resolving often completely. Relapses are NOT characterised by numerous, non-focal symptoms waxing and waning over long periods of time.

What are the most common initial symptoms of MS?

- **Optic neuritis** – typically painful loss of vision (including colour vision) in one eye
- **Brain stem/cerebellar syndromes** – double vision, unsteadiness/ataxia, facial numbness
- **Spinal cord syndromes** – evolving weakness/numbness of both legs (with or without arm involvement)
- **Cerebral hemisphere syndromes** – hemiparesis/hemisensory symptoms

What symptoms are unlikely to represent MS?

Headache, fatigue/tiredness, seizures/blackouts and intermittent sensory symptoms are unlikely to be due to early MS. Intermittent sensory symptoms are perhaps the most common symptom referred regarding MS concerns – these are usually benign, see our "Benign Sensory Symptoms" factsheet. Here the time course is important. MS symptoms usually worsen over days and persist for weeks. MS rarely present with symptoms lasting minutes or hours at a time.

Who needs urgent referral?

People with rapidly evolving and disabling neurological symptoms suggestive of MS (see above) should be referred either via SCI Gateway or via the on call neurology team if the situation is developing very rapidly. Unilateral visual loss may require ophthalmology assessment initially to exclude primary eye disease.

What are the common alternative diagnoses?

In our experience, most people referred with a concern of MS from primary care prove to have an alternative and often more benign diagnosis. The most common are benign sensory symptoms, sometimes nerve entrapment syndromes. Functional neurological disorder can often mimic MS but is characterised typically by much broader clinical syndromes than the rather monochrome MS presentations listed above (i.e. multiple different symptoms, often with pain and fatigue dominating).

**Jon Stone and Richard Davenport, Consultant Neurologists, NHS Lothian
February 2021**

Reference

Coles A. The Bare Essentials Multiple Sclerosis. Practical Neurology 2009;9:118–126. doi:10.1136/jnnp.2008.171132

Key features

MS typically presents in young adults, usually women, with rather stereotyped symptoms

Unilateral visual loss, ataxia, double vision, progressive bilateral/unilateral weakness/numbness are common

Multiple, intermittent and variable symptoms, associated with pain and fatigue, are much less likely to represent MS

