

Understanding Multiple Sclerosis

This brief overview is designed to provide introductory information about MS. More detailed information is available from **www.msaustralia.org.au/what-ms**

What is Multiple Sclerosis (MS)?

Multiple Sclerosis (MS) is an incurable, chronic disease affecting the Central Nervous System (CNS) in which the body's own immune system mistakenly attacks and damages the fatty material – called myelin – around the nerves. This is called an auto-immune response. Myelin allows the nerve to transmit its impulses quickly and smoothly. When myelin is lost or damaged in the brain, optic nerves and spinal cord (causing hardened scars called plaques or lesions), various symptoms can occur.

There is no single cause of MS; however, studies have found a complex interaction between genetic susceptibility (this is different to hereditary), environmental and lifestyle factors.

Although most people's onset of MS starts between 20-40 years, up to 10% of people experience their first MS symptoms before 16 years. For others, diagnosis may be in their 40's or 50's, although this is less common.

What are the symptoms?

MS symptoms are varied and unpredictable, depending on which part of the CNS is affected and to what degree. No two cases of MS are the same.

Symptoms can be both visible and invisible to others. They may include changes in motor control (i.e. unsteady movements), fatigue, sensory symptoms (i.e. pins and needles), visual disturbances, bladder and bowel dysfunction and neuropsychological symptoms (such as brain fog or impaired memory or concentration).

Common symptoms of MS

The symptoms of MS are unpredictable and vary from person to person and from time to time in the same person.

Symptoms may include:



How is MS diagnosed?

It is not easy to diagnose MS as no single test can positively tell if you have MS or not. The problem is that some early symptoms could also be caused by other health conditions. Some common early symptoms are fatigue, stumbling, unusual sensations, slowed thinking and changes in eyesight.

It is best practice for clinicians to refer people suspected of having MS to a specialist MS Neurologist. They will have access to the latest diagnostic criteria, facilities and treatment options. After reviewing a patient's medical history, conducting blood tests and making a physical examination, they might complete a neurological examination. Magnetic Resonance Imaging (MRIs) can detect scars or lesions anywhere in the CNS. Other tests might include a lumber puncture where a small amount of fluid is extracted from your cerebrospinal fluid (CSF) to support MRI findings and increase diagnostic confidence.

Where can I get further information, support and advice?

As the national peak body for Australians living with MS, we work closely with the state MS organisations to help you connect with the right support and services. Your state and territory MS organisations are:

MS Limited

www.ms.org.au

Victoria, NSW, ACT and Tasmania T: **1800 042 138** E: msconnect@ms.org.au

MSWA Western Australia

T: **1300 097 989** E: communications@mswa.org.au www.mswa.org.au

MS Society SA & NT South Australia and Northern Territory

T: **1800 812 311** E: msassist@ms.asn.au www.ms.asn.au

MS Queensland T: 1800 177 591 E: info@msqld.org.au www.msqld.org.au

Types of MS

Clinically Isolated Syndrome (CIS) refers to the first clinical presentation of a disease characterised by inflammatory demyelination (loss of myelin) that could be MS.

Relapsing-Remitting (RRMS) is the most common disease course of MS, characterised by clearly defined attacks followed by periods of complete or partial recovery. Disease can be active or nonactive as well as worsening (confirmed increase in functional impairments) or non-worsening.

A relapse is a relatively sudden episode of either new symptoms or a worsening of existing symptoms that continues for longer than 24 hours (i.e. not temporary) in the absence of fever or other causes and is separated from a previous attack by at least 30 days.

Approximately 85% of people with MS are initially diagnosed with RRMS.

Secondary progressive (SPMS) follows a historic worsening of symptoms after an original diagnosis of RRMS. To date there is no clinical test to determine when this transition happens. SPMS can be either active (with relapses and evidence of new MRI activity) or non-active, as well as with progression (with evidence of worsening) or without progression.

Primary progressive (PPMS) is diagnosed when the condition follows a progressive course from onset, characterised by a worsening of neurological function in the absence of relapses/exacerbations prior to clinical presentation. PPMS involves much less inflammation, resulting in fewer brain lesions than people with RRMS and more lesions in the spinal cord. 10-15% of people with MS are diagnosed with PPMS.

What treatments are available?

MS, like many other chronic diseases, does not have a one-size-fits-all solution. The key strategy or goal in managing MS, is to minimise relapses and eliminate inflammation, new lesions and brain atrophy at all stages of the disease. Treatment goals are also focused on restoring function and minimising the impact of symptoms on day-to-day life.

Disease modifying therapies (DMTs)

or disease modifying treatments or immunotherapies are drugs that work by modifying the activity of the immune system to slow the frequency and severity of attacks to the CNS. In Australia, people with MS have access to over a dozen different treatments. A multi-disciplinary team specialising in MS is best placed to assist in providing patients with an individualised approach to the everevolving treatment options. The choice of therapy should be an informed and shared decision. Taking DMTs early in the course of active relapsing multiple sclerosis can prevent relapses, new brain and spinal cord lesions and prevent worsening of neurological disability.

Symptomatic treatments can be offered in addition to DMTs to target specific symptoms related to MS.

What about brain healthy lifestyle strategies?

You can make positive lifestyle choices that can help you keep your brain as healthy as possible.

- 1. Keep as active as you can
- 2. Keep your mind active
- 3. Keep your weight under control
 - 4. Avoid smoking
 - 5. Watch how much you drink
 - 6. Avoid stress
 - 7. Reorganise your life and priorities
 - 8. Find a good support team
 - 9. Continue taking the medications that your doctor prescribes

MS Research

The research division of MSA is the largest Australian not-for-profit organisation dedicated to funding, coordinating, educating and advocating for MS research as part of the worldwide effort to solve MS.

www.msra.org.au

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www.msaustralia.org.au