

Multiple sclerosis explained

Multiple sclerosis (MS) is the most common chronic disease of the central nervous system among young Australians. Victoria has more people with MS than any other state in Australia. MS is not contagious, but it is progressive and unpredictable.

The health effects of this disease are varied and no two people will share the same symptoms. The cause of MS is unknown and, as yet, there is no cure. However, treatments are available to ease the symptoms and modify the course of the disease.

A common disease

An estimated 2,500,000 people around the world have multiple sclerosis. These people are generally:

- **Young adults** – symptoms first appear between the ages of 20 and 50 years.
- **Female** – 70 per cent of people with MS are female.
- **Caucasian** – 98 per cent of people with MS are Caucasian.
- **Living in temperate zones** – MS is generally more common between latitudes 40° and 60° north and south of the equator.
- **Have a relative with MS** – between 10 and 20 per cent of people with MS have a relative with the disease, suggesting a genetic link.

MS occurs when the protective sheath (myelin) around the nerve fibres in the brain and spinal cord becomes damaged, causing random patches called plaques or lesions. These patches distort and interrupt the messages that are sent along these nerves. 'Sclerosis' means scar and the disease is labelled 'multiple' because the damage usually occurs at a number of points.

The symptoms of MS are varied and unpredictable

MS can damage the central nervous system in many different locations, which means no two people will share the same symptoms. Some of the more common symptoms include:

- Blurred or double vision
- Numbness or pins and needles
- Weakness in the arms or legs
- Loss of balance
- Tendency to drag one foot
- Loss of coordination
- Extreme fatigue
- Continence problems
- Hand tremors
- Loss of mobility
- Problems with or changes in memory functioning
- Speech difficulties and slurring.

MS can take different forms

MS can progress in different ways. Some people with MS may become seriously disabled. Others may have one or two attacks and then remain symptom free for the rest of their lives. The frequency and severity of attacks cannot be predicted.

The different types of MS are classified as follows:

- **Relapsing–remitting MS** – 85 per cent of people with MS start with this type of disease course. Acute episodes of neurological symptoms occur, which last for days, weeks or months before completely or partially resolving. The intervals between attacks can vary widely but, on average, occur every one to two years.
- **Primary progressive MS** – affects around 10 per cent of people with MS from the outset. These individuals experience no relapses but a gradual onset of disability, which does not recover or reverse.
- **Secondary relapsing–remitting MS** – occurs in individuals who started with relapsing–remitting MS but then the relapses diminish in frequency or cease altogether. However, disability continues to accumulate. About 60 per cent of people who start with relapsing–remitting MS develop secondary progressive MS after 15 years.
- **Relapsing progressive MS** – this occurs in about 5 per cent of people from the outset, with relapses occurring and disability accumulating between relapses.

The cause is still unknown

The immune system defends the body from attack by micro-organisms such as bacteria and viruses. In the case of MS, the immune system attacks its own myelin, causing disruptions to the nerve transmissions. The trigger to the disease has not yet been discovered, but it is thought that genetic and environmental factors are involved. Research so far has found that, in nearly two-thirds of cases, a relapse has been preceded by a viral illness.

Diagnosis and treatment

Most of the symptoms of MS can also be caused by other conditions and do not automatically mean a diagnosis of MS. As yet, there is no single test to diagnose MS. A number of specialised tests may be necessary, such as magnetic resonance imaging (MRI).

There are no drugs to cure MS, but there are treatments that can modify the course of the disease and ease some of the symptoms. Health care therapists can help to improve the overall wellbeing of a person with MS.

Where to get help

- Your doctor
- Neurologist
- Health care professionals such as physiotherapists, occupational therapists, nurses and social workers

Things to remember

- MS is a disease of the central nervous system for which there is, as yet, no cure.
- The affects are varied and unpredictable, and no two people with MS will have the same symptoms.
- There are treatments available to modify the course of the disease and ease some of the symptoms.

This page has been produced in consultation with, and approved by:

MS Australia

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