What is Multiple Sclerosis?

Multiple sclerosis (MS) is a disease of the central nervous system (CNS) affecting the brain, spinal cord and optic nerves. The CNS acts as the body’s messenger system. MS is considered to be an autoimmune disease, where the body’s immune system mistakenly attacks normal tissue in the body, resulting in inflammation and swelling. Research to date suggests that this attack is primarily aimed at myelin and oligodendrocytes (the cells responsible for making and maintaining myelin).

Myelin is the fatty covering which acts like the plastic coating on an electrical wire ensuring fast and efficient transmission of nerve impulses between the brain and other parts of the body. Following the breakdown of myelin - a process called demyelination - scar tissue or sclerotic plaques (lesions) form along the myelin sheath. These interfere with the conduction of nerve impulses within the central nervous system. This damage can result in impairment of motor (movement), sensory (sensation) and/or cognitive functions (thinking and memory).

Signs and symptoms

MS affects people differently and is an unpredictable disease. There are different types of MS, different courses for disease progression and different symptoms which can appear sporadically or be ongoing. Symptoms may include muscle weakness, tension, loss of balance, vision problems, fatigue, pain depending on which part of the central nervous system is being affected at the time.

Types of MS

Relapsing-remitting MS (RRMS) is characterised by acute attacks that last days to weeks. The periods between attacks are generally stable and disease progression is not evident. Primary progressive MS exhibits a gradual progression from onset without attacks or remissions. Secondary progressive MS initially looks like RRMS, and later becomes progressive. Progressive-relapsing shows a clear progression of the disease with acute relapses.

Who does it affect?

MS appears most commonly in young adulthood, with most people diagnosed between 20 and 40 years of age. MS can be diagnosed in early childhood or later in life. MS affects three to four times more women than men.

Treatment

Treatments for RRMS aim to reduce the number and severity of relapses; ultimately reducing the damage that occurs leading to longer-term disability. Early treatment is highly recommended and may involve a mix of medical treatments, medication and therapies.
Frequently Asked Questions

Q: How is multiple sclerosis diagnosed?
A: There is no single test or scan which can be used to diagnose MS. The diagnosis is a clinical one, made on the basis of medical history and an assessment of presenting signs and symptoms detected during a neurological examination.

Q: I have been diagnosed with MS. Will I end up in a wheelchair?
A: MS is a chronic condition. But it is not always a disabling one. Research indicates that approximately 85% have the relapsing-remitting type of MS at the time of diagnosis. About 50% of people with this type of MS do not convert to secondary progressive within 15 years after diagnosis. Most MS experts believe that the progressive phase of MS can be delayed, or prevented, by early treatment with disease-modifying therapies.

Q: What is a relapse?
A: A relapse is an acute exacerbation of symptoms which may last days to weeks and may or may not leave residual deficits.

Q: Is it contagious?
A: No

Q: Is there a cure for MS?
A: The cause and a cure for MS is currently unknown, but there is millions of dollars worth of research taking place to try and solve the mystery of MS!

MSWA Services

The Multiple Sclerosis Society of WA (MSWA) have an experienced, dedicated Health Team provide current and credible information, support and services for people with multiple sclerosis and their significant others. We aim to empower and prepare people for their journey with MS. The diverse range of services provided to Members include: nursing – community access, hospital liaison and immunotherapy, physiotherapy and massage, counselling, occupational therapy, in home support and respite care and Living Well with MS seminars.

Phone 08 9365 4888 for more information or visit www.mswa.org.au

Resources

- MSWA website: www.mswa.org.au
- Publications available from MSWA such as What is MS? Nutritional Guidelines for MS, Fatigue and MS, Has Your Mum or Dad got MS?, Working and MS booklet
- MS Australia: www.msaustralia.org.au
- UK MS Trust www.mstrust.org.uk
- MS for Dummies (2007) Rosalind Kalb, Ph.D., Nancy Holland, RN.