

## Multiple sclerosis - treatment options

The nerves of the central nervous system are sheathed in myelin, a substance that assists in nerve function. Multiple sclerosis (MS) is a disease of the central nervous system that inflames the myelin and causes plaques or lesions to appear. The brain, spinal cord and optic nerves can be affected. The disease most commonly affects young white females living in temperate regions of the world.

The cause of MS is not known, although genetic and environmental factors are thought to be involved. The two major forms of MS include relapsing–remitting and progressive. There is no cure as yet, but there are treatments available to treat acute attacks or relapses, manage many of the symptoms and modify the course of the disease by reducing the rate of relapse.

### The symptoms vary

The symptoms of MS are varied and unpredictable, depending on which part of the central nervous system is affected and to what degree. The relapsing–remitting form of MS is the more common. The person experiences attacks in which the symptoms are severe for a short time and then improve, often with an almost complete recovery. The progressive form of MS is characterised by a steady worsening of symptoms without any remissions.

The symptoms can be any combination of the five major health problems of MS, including:

- **Motor control** – muscular spasms and problems with weakness, coordination, balance and functioning of the arms and legs.
- **Fatigue** – including heat sensitivity.
- **Other neurological symptoms** – including vertigo, pins and needles, neuralgia and visual disturbances.
- **Continence problems** – including bladder incontinence and constipation.
- **Neuropsychological symptoms** – including memory loss, depression and cognitive (thought-related) difficulties.

### Drug treatment

The main aims of drug therapy for MS are to shorten the duration of attacks or relapses, ease specific symptoms and slow the progression of disease by reducing the rate of the attacks. The types of drugs used in treatment depend on a number of factors, including the person's form of MS.

Some of the drug treatments available include:

- **Immunotherapy** – drugs that are taken in the form of subcutaneous (under the skin), intramuscular or intravenous injection. These medications slow the frequency and severity of attacks, which means the myelin sheaths are subjected to less damage. Immunotherapy works by modifying the activity of the immune system. This treatment is prescribed for people with relapsing–remitting MS.
- **Corticosteroids** – taken either as pills or injections. These drugs are used to shorten the duration of an MS attack, by easing inflammation at the affected site.

### Side effects of drug treatment

The possible side effects of drug treatment depend on the medications used and you should discuss any concerns with your doctor. Depending on the drug, side effects may include:

- Drowsiness
- Gastrointestinal upsets
- Fluid retention
- Swelling
- Flu-like symptoms
- Skin irritation at the site of injection

- Mood-altering effects.

### Treatment for specific symptoms

Treatments for specific symptoms may include a range of treatments, including:

- **Muscle problems** – a combination of drugs may ease muscle problems, including stiffness and tremors. Physiotherapy is also recommended.
- **Fatigue** – some studies have found that drugs used to treat the sleep disorder narcolepsy are helpful in controlling MS-related fatigue.
- **Neurological symptoms** – visual disturbances can be helped with drugs, including steroids.
- **Contenance** – treatment for continence problems may include special exercises, medications, continence aids (such as disposable pads) and certain dietary changes.
- **Neuropsychological problems** – treatment for depression or anxiety may include counselling or medication. Memory problems and other cognitive difficulties can be better managed with professional help from a neuropsychologist.

### Health care providers

A person with MS can better manage their symptoms by drawing on the resources of a health care team, including:

- **Physiotherapy** – including tailored exercise programs to improve strength, coordination and flexibility.
- **Occupational therapy** – to learn coping strategies and new energy-saving skills to ensure a more independent life. These may include the use of aids.
- **Neuropsychological therapy** – including techniques to improve memory and cognitive skills.
- **Other therapies** – as needed, such as speech therapists or eye specialists.
- **Nursing.**
- **Social workers.**

### Alternative therapies

Medications and physical therapies can be complemented by alternative therapies. See your health care provider for information, advice and possible referral. The range of alternative therapies that may be helpful include:

- Acupuncture
- Biofeedback therapy
- Chiropractic
- Hypnosis
- Massage
- Meditation
- Relaxation techniques
- Tai chi
- Yoga.

### Where to get help

- Your doctor
- Neurologist
- The MS Society of NSW/Vic Tel. (03) 9845 2700 or Tel. 1800 042 138

### Things to remember

- Multiple sclerosis (MS) is an incurable disease of the central nervous system that can affect the brain, spinal cord and optic nerves.
- The principle aims of drug therapy for MS are to shorten attacks, manage specific symptoms and slow the progression of disease by reducing the relapse rate.
- Drugs used in treatment are prescribed for each individual's specific needs.
- A person with MS can better manage their symptoms by drawing on the resources of a range of different health care providers.

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

Multiple Sclerosis Society

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