



# Multiple sclerosis information

---

## for health and social care professionals

MS: an overview

Diagnosis

Types of MS

Prognosis

Clinical measures

A multidisciplinary approach to MS care

Self-management

Relapse and drug therapies

Relapse

Steroids

Disease modifying drug therapies

Symptoms, effects and management

Vision

Fatigue

Cognition

Depression

Women's health

Bladder

Bowel

Sexuality

Mobility

Spasticity

Tremor

Pain

Communication and swallowing

Pressure ulcers

Advanced MS

Complementary and alternative medicine

Index

## Section 2

### Relapse

Approximately 85% of people diagnosed with MS will have relapsing remitting MS. Relapsing remitting MS is characterised by a series of relapses (also referred to as an attack, a flare up, an episode or exacerbation), interspersed with periods of remission.

A relapse is defined as a sudden episode of symptoms or disability, in the absence of fever or infection, which lasts at least 24 hours, and is a neurological disturbance typical of MS<sup>1</sup>. A relapse must occur at least 30 days since the start of a previous episode.

Relapses occur spontaneously and are thought to be due to an episode of acute inflammation within the CNS. Frequency of relapses is very variable, some people will experience several in a year whilst others will be relapse free for many years. In one retrospective study in a population of 2,477 relapsing remitting patients, over three quarters experienced a five year relapse-free period<sup>2</sup>. On average, people will experience approximately 0.6 relapses per year with frequency gradually decreasing during the course of the condition<sup>3</sup>.

People with secondary progressive MS may also experience superimposed relapses and relapses have been reported in people with primary progressive MS<sup>4</sup>.

The symptoms experienced depend on the area of the brain or spinal cord affected. Typically, a relapse evolves over a few days, reaches a plateau, and then remits to a variable degree over a few weeks or months. Some relapses are relatively mild while others may cause more serious problems; most relapses do not require hospitalisation.

Relapses can have a significant impact not only on physical symptoms but also on social, financial and psychological well-being of those affected<sup>5,6</sup>. They may provoke fresh feelings of bereavement or fear.

People may recover completely in episodes of remission or may have residual disability. Incomplete recovery has been found to range from 20 to 60% in different studies<sup>7</sup>.

### Managing relapses

Different centres have different approaches to managing relapses. For many people, their MS nurse will be the first point of contact, for others it could be their neurologist or GP. Following diagnosis, an MS nurse or other health professional

should explain the procedure to follow if the patient thinks they may be having a relapse.

A number of UK MS specialist centres have audited their relapse management services and developed protocols to ensure that anyone experiencing a relapse is assessed and offered appropriate treatment as soon as possible<sup>3,8-11</sup>.

Symptoms similar to those of a relapse can occur when there is an infection, often a urinary or respiratory infection. It is important to differentiate a relapse from a 'pseudo-relapse', which is a temporary worsening of pre-existing symptoms due to concurrent fever, illness or infection. Pseudo-relapses never present with new symptoms, often last only a few hours, and management should be aimed at treating the underlying infection. Urinary tract infections may be asymptomatic so routine screening is recommended<sup>3</sup>. It is important to rule out infection before commencing treatment with steroids.

### Steroids

If the symptoms of the relapse are not due to infection and are affecting day to day function, treatment with a short course of high dose steroids is recommended. Studies have shown that steroids are effective in speeding up recovery from relapses but make no difference either to the degree of recovery or to the long-term progression of the condition<sup>4</sup>.

The NICE Clinical Guideline<sup>12</sup> recommends that any individual who experiences an acute episode sufficient to cause distressing symptoms or an increased limitation on activities should be offered a short course of high-dose corticosteroids. The course should be started as soon as possible after onset of the relapse and should be either:

- intravenous methylprednisolone, 500mg-1g daily, for between 3-5 days or
- high-dose oral methylprednisolone, 500mg-2g daily, for between 3-5 days.

Frequent (more than three times a year) or prolonged (longer than three weeks) use of corticosteroids should be avoided.

A comparison of oral and intravenous corticosteroid treatments in MS shows that there are no major differences in clinical outcomes and both treatments appear to be equally effective and safe<sup>13</sup>.

In the short-term, the side effects of methylprednisolone are usually minor and transient, but may include:

- indigestion
- mood changes/mood swings

- altered sleep pattern
- increased appetite
- metallic taste
- flushing of the face.

Special care is needed for people who have diabetes, and for those with previous gastric problems who may need medication to protect the stomach. Long-term treatment should normally be avoided due to side effects including, weight gain, acne, cataracts, osteoporosis (thinning of the bones, particularly the head of the thigh bone), and diabetes.

### Other treatments

There are many other management considerations apart from possible treatment with steroids.

Depending on the symptoms, their severity and how they are affecting daily life, various adjustments and equipment may be necessary. For example, a mother with sensory symptoms in her hands might require help to care for her young baby and to cook.

Someone experiencing problems with walking may benefit from a walking stick. It may be necessary to take time off work and/or temporarily reduce activities.

There is evidence that recovery from relapse is improved if neurorehabilitation is provided at the same time as steroids are prescribed<sup>14</sup>. When someone experiences a sudden increase in disability or dependence, the NICE Clinical Guideline<sup>12</sup> recommends the individual should be:

- given support, as required and as soon as practical, both in terms of equipment and personal care
- referred to a specialist neurological rehabilitation service.

The urgency of the referral should be judged at the time, and this referral should be in parallel with any other medical treatment required.

Experiencing a relapse is often a very stressful time for both people with MS and their families who typically have a lot of unanswerable questions about when their symptoms will resolve, whether they will make a full recovery, the likelihood of further relapses or if the relapse is the start of a more progressive phase. At this time the need for reassurance is high. Health professionals sensitive to these issues can provide the communication and counselling skills needed.

### Reducing the risk of relapses

Disease modifying therapies reduce the number and severity of relapses. See p24 *Disease modifying drug therapies*.

Life style issues may be important in reducing the risk of relapses. A well-balanced diet and regular exercise will promote good health and can help reduce the risk of relapse triggers such as infections. Strong evidence suggests that relapses can be triggered by infections, during the three month period after giving birth and stressful life events<sup>15</sup>. Vaccinations against influenza, hepatitis B and tetanus appear to be safe. Surgery, general and epidural anaesthesia and physical trauma are not associated with an increased risk of relapses.

### References

1. Polman CH, Reingold SC, Banwell B, et al. Diagnostic criteria for multiple sclerosis: 2010 revisions to the McDonald criteria. *Ann Neuro* 2011;69(2):292-302.
2. Tremlett H, Zhao Y, Joseph J, et al. Relapses in multiple sclerosis are age- and time-dependent. *J Neurol Neurosurg Psychiatry* 2008;79(12):1368-74.
3. Ennis M, Shaw P, Barnes F, et al. Developing and auditing multiple sclerosis relapse management guidelines. *Br J Neurosci Nurs* 2008;4(6):266-71.
4. Sellebjerg F, Barnes D, Filippini G, et al. EFNS guideline on treatment of multiple sclerosis relapses: report of an EFNS task force on treatment of multiple sclerosis relapses. *Eur J Neurol* 2005;12(12):939-46.
5. Halper J. The psychosocial effect of multiple sclerosis: the impact of relapses. *J Neurol Sci* 2007;256 Suppl 1:S34-8.
6. Kalb R. The emotional and psychological impact of multiple sclerosis relapses. *J Neurol Sci* 2007;256 Suppl 1:S29-33.
7. Leone MA, Bonissoni S, Collimedaglia L, et al. Factors predicting incomplete recovery from relapses in multiple sclerosis: a prospective study. *Mult Scler* 2008;14(4):485-93.
8. Matheson F, Porter B. The evolution of a relapse clinic for multiple sclerosis: challenges and recommendations. *Br J Neurosci Nurs* 2006;2(4):180-6.
9. Warner R, Thomas D, Martin R. Improving service delivery for relapse management in multiple sclerosis. *Br J Nurs* 2005;14(14):746-53.
10. Embrey N, Lowndes C. Benchmarking best practice in relapse management of multiple sclerosis. *Nurs Stand* 2003;17(22):38-42.
11. Porter B, Matheson F, Chataway J, et al. Key steps to delivery of a person-centred relapse service [Internet]. Letchworth Garden City: MS Trust; 2010 [cited 2011 Sept 1]. [www.mstrust.org.uk/downloads/key\\_steps.pdf](http://www.mstrust.org.uk/downloads/key_steps.pdf).
12. National Institute for Health and Clinical Excellence. Multiple sclerosis - management of multiple sclerosis in primary and secondary care. NICE Clinical Guideline 8. London: NICE; 2003.
13. Burton JM, O'Connor PW, Hohol M, et al. Oral versus intravenous steroids for treatment of relapses in multiple sclerosis. *Cochrane Database Syst Rev* 2009;(3):CD006921.
14. Craig J, Young CA, Boggild M, et al. A randomised controlled trial comparing rehabilitation against standard therapy in multiple sclerosis patients receiving intravenous steroid treatment. *J Neurol Neurosurg Psychiatry* 2003;74(9):1225-30.
15. D'hooghe MB, Nagels G, Bissay V, et al. Modifiable factors influencing relapses and disability in multiple sclerosis. *Mult Scler* 2010;16(7):773-85.

### MS Trust resources

Key steps to delivery of a person-centred relapse service.

[www.mstrust.org.uk/downloads/key\\_steps.pdf](http://www.mstrust.org.uk/downloads/key_steps.pdf).



We hope you find the information in this book helpful. If you would like to speak with someone about any aspect of MS, contact the MS Trust information team and they will help find answers to your questions.

This book has been provided free by the Multiple Sclerosis Trust, a small UK charity which works to improve the lives of people affected by MS. We rely on donations, fundraising and gifts in wills to be able to fund our services and are extremely grateful for every donation received, no matter what size.

## MS Trust information service

### Helping you find the information you need

The MS Trust offers a wide range of publications, including a newsletter for health and social care professionals Way Ahead and the MS Information Update, which provides an ongoing update on research and developments in MS management.

For a full list of MS Trust publications, to sign up for Way Ahead and much more visit our website at [www.mstrust.org.uk](http://www.mstrust.org.uk)



Freephone 0800 032 3839 (Lines are open Monday - Friday 9am-5pm)

email [infoteam@mstrust.org.uk](mailto:infoteam@mstrust.org.uk)

write MS Trust  
Spirella Building  
Letchworth Garden City  
SG6 4ET



This publication will be reviewed in three years

MS Trust  
Multiple sclerosis information for health and social care professionals. Fourth edition.  
ISBN 1-904 156-24-X  
© 2011 Multiple Sclerosis Trust

Registered charity no. 1088353

All rights reserved. No part of this book may be produced, stored in a retrieval system or transmitted in any form by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise without written permission of the publisher.