Onset symptoms of multiple sclerosis

Definite:
These symptoms must last for at least 24 hours.
Unilateral optic/retrobulbar neuritis
Acquired monocular colour blindness
Optic atrophy
True binocular diplopia
Tic douloureux (under age 40)
Hemifacial spasm (under age 40)
Acute unilateral diminution of hearing (under age 40)
Transient acute non-positional vertigo (under age 40)
Transient scanning speech
Transverse myelitis
Lhermitte syndrome
Gait ataxia
Unilateral dysmetria/intention tremor/incoordination
Sensory useless hand syndrome
Transient weakness/paraeesthesiae of one entire limb
Transient painless urinary retention (under age 40)
Transient painless urinary urgency/incontinence in men (under age 40)

Possible:
For these symptoms to be used as onset markers, they must be followed by a definite symptom within two years.

Unilateral facial palsy
Transient painless urinary frequency in men (under age 40)
Transient hemiparesis (under age 40)
Organic erectile dysfunction
Painful tonic seizures

To accept a Lhermitte symptom, it is desirable, although not required, that the symptom be transient. More important, however, is the fact that other causes for this symptom, in particular herniated nucleus pulposus or spondylosis in the cervical region, must have been ruled out. Gait ataxia and unilateral dysmetria/intention tremor/incoordination may be manifestations of damage to the deep layers of the cerebellum or of the posterior columns with loss of position sense. Unusual clumsiness, dropping things, changes in handwriting, and inability to perform fine hand movements or activities such as sewing, embroidery, or fine instrument manipulation, may be the expression of these problems affecting the hands. The reason that they must be unilateral to indicate multiple sclerosis is to rule out familial essential tremor or the fine tremor of hyperslymobirexia, which are invariably bilateral.

The useless hand syndrome* has an acute or subacute onset and consists of paraesthesiae and weakness in one arm and a decreased ability to use the hand properly. Men often report that they cannot use that hand to identify coins in their pocket, and the same applies to women trying to search for objects in their purse. Handwriting is usually impaired as well.

Transient paraesthesiae are understood to involve only one entire limb to differentiate them from the much more common carpal tunnel syndrome, as well as from the frequent complaint of bilateral numbness of the arms and hands on awakening or involving both legs with lumbarosacral spine disease. Painless urinary urgency or incontinence in women is very often a symptom of bladder infection and therefore is relevant only when it occurs in men. Acute urinary retention occurring under the age of 40 distinguishes it from the problems caused by prostatic enlargement and some gynaecological difficulties in women.

Symptoms considered as "possibly relevant" should be counted only if a definite symptom as listed here occurs within two years. Facial palsy is a very common problem but rare as a presenting symptom of multiple sclerosis. In men urinary frequency and transient hemiparesis, both occurring under the age of 40, are fairly specific, but other conditions causing these same symptoms occur often enough to dictate caution in using them in this set of criteria. Impotence to be classified as organic erectile dysfunction must include the lack of morning erection. It does not, however, include the inability to achieve orgasm. Finally, painful tonic seizures again are non-specific although probably more frequent in patients with multiple sclerosis than in any other conditions.

The original lists were reviewed by the following multiple sclerosis specialists: Johan Aarli, Bergen, Norway; Peter Behan, Glasgow, UK; John Benedikt, Reykjavik, Iceland; Alastair Compton, Cambridge, UK; Floyd Davis, Chicago, USA; Geoffrey Dean, Dublin, Eire; John Kurtsze, Washington, DC, USA; Brian Matthews, Oxford, UK; Ian MacDonald, London, UK; Donald Paré, Vancouver, Canada; Sigrid Poser, Göttingen, Germany; Giulio Rosati, Sassari, Italy; Randall Schapiro, Minneapolis, USA; Labe Scheinberg, New York, USA; and Donald Silberberg, Philadelphia, USA. Many useful comments and suggestions were made, most of which were incorporated into the final list. Endorsement of the lists of symptoms by these specialists is not implied.

CHARLES M POSER
Department of Neurology,
Harvard Medical School, Beth Israel Hospital,
Boston, MA 02215, USA

Correspondence to: Dr Charles M Poser,
Neurological Unit, Harvard Medical School/Beth Israel Hospital,
330 Brookline Ave, Boston, MA 02215, USA


Multiple sclerosis in the Paris

During the course of a search for patients with multiple sclerosis among Asian immigrants in England and Wales, five Parisians have been found with definite multiple sclerosis, one male and four female. The Parisi are Zoroastrians who left Persia (Iran) and settled in India, most in Bombay. They are a closely knit community. According to the Religious and Cultural Centre of the Parsi and Irani Zoroastrian community there are around 5000 Parsi resident in England and Wales and most of the adult members of the community came to England from the Indian subcontinent or East Africa.

By contrast with the Parisi multiple sclerosis is very uncommon among ethnic Indian immigrants to England and Wales, and also among Indians in India.* During a 25 year search for patients with multiple sclerosis among Asian immigrants to England only 23 patients have been found among ethnic Indian immigrants. Among Indians in India in 1981 there were 383 000 immigrants from India and a further 193 000 immigrants from East Africa resident in England and Wales and most of these immigrants were of Indian ethnic origin.

The prevalence of multiple sclerosis in the Parsis of Bombay is also much higher than among ethnic Indians.** The high prevalence of multiple sclerosis among Parsi immigrants to England, by contrast with the very low prevalence among ethnic Indian immigrants, may be an important clue to the genetic and environmental factors responsible for the disease.

We would be most grateful if any doctor who knows of a Parisi with multiple sclerosis would, with the permission of the patient, notify Dr Geoffrey Dean at the address below.

GEOFFREY DEAN
NOSHIR H WADIA
PO Box 1851,
Ballbriggan,
Dublin 4, Ireland


A new treatment of spasticity with repetitive magnetic stimulation in multiple sclerosis

Electromagnetic fields easily penetrate tissues, independent of tissue density and resistance. This property is applied in transcranial magnetic stimulation of neocortical neurons used to evaluate motor pathway function. Similarly, deep seated neurons in the spinal cord can be evoked by non-invasive trans-spinal magnetic stimulation. We designed a magnetic stimulator with repetitive stimulation capabilities to study the effect of magnetic stimulation on spasticity in multiple sclerosis.

The study was performed as a comparison of pretreatment and post-treatment
Multiple sclerosis in the Parsis.

G Dean and N H Wadia

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