Onset symptoms of multiple sclerosis

Definite:
These symptoms must last for at least 24 hours.
- Unilateral optic/retrobulbar neuritis
- Acquired monoclonal colour blindness
- Genitalis
- True binocular diplopia
- Tic douloureux (under age 40)
- Hemispheric spasm (under age 40)
- Acute unilateral diminution of hearing (under age 40)
- Transient acute non-palpable vertigo (under age 40)
- Transient scanning speech
- Transverse myelitis
- Lhermitte syndrome
- Gait ataxia
- Unilateral dysmetria/intention tremor/coordination
- Sensory useless hand syndrome
- Transient weakness/parasthesia 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)
- 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 nucle-
us pulposus or spondylosis in the cervical region, must have been ruled out. Gait ataxia and unilateral dysmetria/intention tremor/coordination may be manifesta-
tions of the involvement 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 hypothyroidism, 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 lumbosacral 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 symp-
toms occur often enough to dictate caution in using them in this set of criteria. Impotence to be classified as organic erec-
tile 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 Benedikti, Reykjavik, Iceland; Alastair Compston, Cambridge, UK; Floyd Davis, Chicago, USA; Geoffrey Dean, Dublin, Eire; John Kurtzke, Washington, DC, USA; Brian Matthews, Oxford, UK; Ian MacDonald, London, UK; Donald Faro, Vancouver, Canada; Sigrid Poeser, Gottingen, 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 incor-
porated into the final list. Endorsement of the lists of symptoms by these specialists is not implied.

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2 Paty D, Poser C. Clinical symptoms and signs. In: Poser C, ed. The diagnosis of multi-

Multiple sclerosis in the Paris:

During the course of a search for patients with multiple sclerosis among Asian immi-
grants resident in England, five Paris have been found with definite multiple sclerosis, one male and four female. The Paris are Zoroastrians who left Persia (Iran) and ser-
ted in India, mostly in Bombay. They are a closely knit community. According to the Religious and Cultural Centre of the Parsi and Iranian 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 Hindu immigrants to England and Wales,1 and also among Indians in India.2 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, and of these only 19 in 1983 there were 383 000 immigrants from India and a further 193 000 immi-
grants 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.

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5 Wadia NH, Bharda K. Multiple sclerosis is rare in the Zoroastrians (Persians) of India. Ann Nuerol 1990;26:177-9.

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 trans-
cranial 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 capability to study the effect of magnetic stimulation on spasticity in multiple sclerosis.

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

G Dean and N H Wadia

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