



bmj.com

All series in one place!

bmj.com/series has now got a link to all the series that have appeared in the BMJ.

Author Keywo

Vol Page

HOME HELP FEEDBACK SUBSCRIPTIONS ARCHIVE SEARCH TABLE OF CONTENTS

[Advanced]

Journal of Neurology Neurosurgery and Psychiatry 2003;74:29-32

© 2003 Journal of Neurology Neurosurgery and Psychiatry

PAPER

79e

Incidence (1988–97) and prevalence (1997) of multiple sclerosis in Västerbotten County in northern Sweden

P Sundström¹, L Nyström² and L Forsgren¹

¹ Department of Neurology, Umeå University Hospital, Umeå, Sweden

² Department of Epidemiology and Public Health, Umeå University Hospital

Correspondence to:

Dr Peter Sundström, Department of Neurology, Umeå University Hospital, S-901

85 Umeå, Sweden;

peter.sundstrom@neuro.umu.se

Received 16 May 2002

In final revised form 23 September 2002

Accepted 23 September 2002

► ABSTRACT

Objective: To investigate the incidence and prevalence of multiple sclerosis in Västerbotten County in northern Sweden.

Methods: Multiple sources were used in the case identification process. Follow up interviews with clinical examinations were undertaken and, when indicated, additional paraclinical investigations were done. In this way case ascertainment was assured and supplemental clinical data were collected. The incidence rate was based on symptom onset. Onset adjusted prevalence was applied.

Results: The crude incidence rate of multiple sclerosis in 1988–97 in Västerbotten County was 5.2/10⁵ (95% confidence interval, 4.4 to 6.2): 6.7/10⁵ (6.0 to 8.3) in women and 3.7/10⁵ (2.7 to 4.9) in men. The

This Article

- ▶ Abstract FREE
- ▶ Full Text (PDF)
- ▶ Submit a response
- ▶ Alert me when this article is cited
- ▶ Alert me when eLetters are posted
- ▶ Alert me if a correction is posted
- ▶ Citation Map

Services

- ▶ Email this link to a friend
- ▶ Similar articles in this journal
- ▶ Similar articles in PubMed
- ▶ Add article to my folders
- ▶ Download to citation manager
- ▶ Cited by other online articles

Google Scholar

- ▶ Articles by Sundström, P
- ▶ Articles by Forsgren, L
- ▶ Articles citing this Article

PubMed

- ▶ PubMed Citation
- ▶ Articles by Sundström, P
- ▶ Articles by Forsgren, L

Related Collections

- ▶ Other Epidemiology
- ▶ Multiple sclerosis

▲ TOP
• ABSTRACT
▼ METHODS
▼ RESULTS
▼ DISCUSSION
▼ REFERENCES

onset adjusted prevalence for 31 December 1997 was 154/10⁵ (139 to 170): 202/10⁵ (179 to 228) in women and 105/10⁵ (89 to 125) in men. When compared with a previous estimate of prevalence, a yearly 2.6% increase in prevalence between 1990 and 1997 was found, mainly attributable to a higher incidence than mortality.

Conclusions: The present incidence rate and prevalence confirms earlier findings that Västerbotten is a high risk area for multiple sclerosis. The adjusted incidence was twice as high as the incidence from 1974–88 in the only previous Swedish population based study from Göteborg, but comparable with other recent Fennoscandian multiple sclerosis incidence rates.

Keywords: multiple sclerosis; incidence; Sweden

Geographical variation in multiple sclerosis occurrence has challenged researchers since the beginning of the 20th century.¹ Incidence data from different areas in Scandinavia are available and have been compared.² Population based studies of multiple sclerosis incidence in Sweden have previously only been done in Göteborg in south west Sweden.³ Our aim in this study was to investigate multiple sclerosis incidence and prevalence in Västerbotten County in northern Sweden—using multiple sources for case identification and follow up interviews, together with medical records for data collection and case ascertainment—and to provide a base for further follow up studies.

► METHODS

Västerbotten County is located in northern Sweden at 64–65°N latitude. It is sparsely populated with 255 987 inhabitants at the midpoint of the incidence period 1988–97, and 259 163 on the prevalence day, 31 December 1997, in an area of 55 432 km².

▲	TOP
▲	ABSTRACT
▪	METHODS
▼	RESULTS
▼	DISCUSSION
▼	REFERENCES

The database used in a previous study, with the prevalence day 1 January 1990,⁴ was extended using the same multiple sources. A computerised data register search from all three hospitals in Västerbotten County was extended through year 2000. Inpatients were selected from the neurology (also outpatients), neurosurgery, neurorehabilitation, internal medicine, ophthalmology, paediatric, and geriatric clinics with ICD codes corresponding to the following diagnoses: multiple sclerosis, demyelinating disorders in CNS, optic neuritis, spastic paraplegia, ataxia, myelopathy, spinocerebellar disease, and myelitis. In addition we used six other sources:

- Register for CSF electrophoresis analyses 1988–2000: analyses with presence of oligoclonal bands or signs of intrathecal IgG production were recorded.
- General practitioners, 1988–98: in April 1998 all general practitioners were contacted by letter; we asked for information on patients with multiple sclerosis or inflammatory disorder of the central nervous system for the past 10 year period.