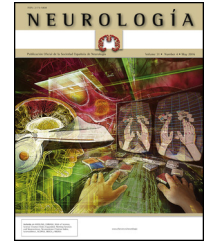




NEUROLOGÍA

www.elsevier.es/neurologia



ORIGINAL ARTICLE

Prevalence of myasthenia gravis in the Catalan county of Osona[☆]

J.M. Aragonès^a, J. Altimiras^{b,*}, P. Roura^b, F. Alonso^c, E. Bufill^a, A. Munmany^d, S. Alfonso^a, I. Illa^e

^a Servicio de Neurología, Consorci Hospitalari de Vic, Vic, Barcelona, Spain

^b Servicio de Epidemiología Clínica e Investigación, Consorci Hospitalari de Vic, Vic, Barcelona, Spain

^c Servicio de Medicina Interna, Consorci Hospitalari de Vic, Vic, Barcelona, Spain

^d Servicio de Neurología, Clínica de Vic, Vic, Barcelona, Spain

^e Unidad de Enfermedades Neuromusculares, Departamento de Neurología, Hospital de la Santa Creu i Sant Pau, Barcelona, Spain

Received 30 May 2014; accepted 6 September 2014

KEYWORDS

Myasthenia gravis;
Prevalence;
Neuroepidemiology;
Immunosenescence;
Ageing;
Geriatric neurology

Abstract

Introduction: The reported prevalence of myasthenia gravis ranges between 5 and 24 cases per 100,000, and people over 65 years account for less than 50% of all cases. The prevalence and clinical characteristics of myasthenia gravis in the county of Osona were studied in patients younger and older than 65.

Methods: The study draws from the county-based prospective myasthenia gravis register implemented by the Neurology Department at Hospital General de Vic in 1991.

Results: The prevalence of myasthenia gravis was 32.89×10^5 inhabitants (95% CI, 23.86–41.91). The standardised prevalence (European population) was 35.47×10^5 inhabitants (95% CI, 26.10–44.84). The ratio of women to men was 1.3. Overall, the group of patients older than 65 accounted for 62.75% of all cases. The prevalence of myasthenia gravis increased considerably in older age groups. No cases were registered among patients under 25 years old, prevalence was 21.87×10^5 in the 25 to 64 age group, and prevalence in patients over 65 years increased to 122.35×10^5 . The clinical characteristics prior to treatment and at the cut-off date are similar ($P > .05$) in patients younger than 65 and those aged 65 and older.

Conclusions: These figures show the highest prevalence rate reported to date. This high prevalence is due to the rate observed among patients older than 65. These results provide a new warning that myasthenia gravis may be underdiagnosed in the elderly population.

© 2014 Sociedad Española de Neurología. Published by Elsevier España, S.L.U. All rights reserved.

[☆] Please cite this article as: Aragonès JM, Altimiras J, Roura P, Alonso F, Bufill E, Munmany A, et al. Prevalencia de miastenia gravis en la comarca de Osona (Barcelona, Cataluña). Neurología. 2016. <http://dx.doi.org/10.1016/j.nrl.2014.09.007>

* Corresponding author.

E-mail address: jaltimiras@chv.cat (J. Altimiras).

PALABRAS CLAVE

Miastenia gravis;
Prevalencia;
Neuroepidemiología;
Senescencia
inmunológica;
Edad avanzada;
Neurogeriatría

Prevalencia de miastenia gravis en la comarca de Osona (Barcelona, Cataluña)**Resumen**

Introducción: La prevalencia descrita de miastenia gravis (MG) oscila entre 5 y 24 casos por 100.000, representando los mayores de 65 años menos del 50% del total. Se presenta la prevalencia de MG en la comarca de Osona (Barcelona, España). Se describen la prevalencia y las características clínicas por grupos de edad, diferenciando los menores y mayores de 65 años.

Métodos: El Servicio de Neurología del Hospital General de Vic puso en marcha en el año 1991 un registro comarcal sobre los casos de MG diagnosticados.

Resultados: La prevalencia de MG fue de $32,89 \times 10^5$ habitantes (IC 95%, 23,86–41,91). La prevalencia estandarizada (población europea) fue del $35,47 \times 10^5$ habitantes (IC 95%, 26,10–44,84). La razón por sexo, mujeres/hombres, es de 1,3. De forma global, el grupo de más de 65 años representa el 62,75% de los casos. Las prevalencias de MG por grandes grupos de edad presentan un carácter marcadamente ascendente, pasando de ningún caso en el grupo de menos de 25 años, a $21,87 \times 10^5$ en el grupo de 25 a 64 años, alcanzando $122,35 \times 10^5$ en el grupo de 65 y más años. Las clínicas pretratamiento y a fecha de corte no presentan diferencias estadísticamente significativas ($p > 0,05$) entre menores y mayores de 65 años.

Conclusiones: Se describe la prevalencia más alta comunicada hasta la actualidad. Esta alta prevalencia es a expensas del grupo de más de 65 años. Estos resultados son una nueva alerta para evitar el infradiagnóstico de la MG en el anciano.

© 2014 Sociedad Española de Neurología. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Myasthenia gravis (MG) may be underdiagnosed in elderly patients since some of its initial symptoms, including diplopia, dysphagia, dysarthria, dyspnoea, limb weakness, and repeated falls, are usually attributed to other more frequent diseases in this age group.¹ In the early 1990s, onset of MG in patients older than 70 was considered to be extremely rare. Surprisingly, most new cases in our hospital were elderly patients. For this reason, a specific database for cases of MG in the county of Osona (Catalonia) was created in 1991. The mean annual incidence of MG between 1991 and 2000 was found to be 21.3 cases per million people; this rate was higher than anticipated, especially due to the number of cases among the elderly.² Between 2001 and 2010, the incidence rate was 28.0 cases per million people, with a median age of 74 years; the incidence increased each decade from the age of 65. MG should therefore be considered a disease of the elderly.³ Other studies have also shown a high incidence of this disease in elderly patients.^{4–6}

The estimated prevalence of MG ranges between 5 and 24 cases per 100 000 people; patients older than 65 represent less than 50% of the total.^{7,8} These studies have been conducted in large populations or are drawn from the health system's diagnostic records, this approach may not be conducive to correct identification of cases used to calculate the prevalence. The incidence rates found in Osona suggest an even higher prevalence of MG.

We analyse the prevalence of MG in a county in the province of Barcelona more than 20 years after the creation of an MG register; during this period, the highest incidence to date was reported on 2 occasions.^{2,3} We also describe the prevalence and clinical characteristics of our patient sample broken down by age group (younger than vs older than 65).

From a demographic viewpoint, the county of Osona has an elderly population: in 2013, 16.87% of the total inhabitants were at least 65.⁹ In 2014, life expectancy in Catalonia reached 79.5 years for men and 85.3 years for women.⁹

Patients and methods

Hospital General de Vic is located in Osona, a county in the north of the Catalan province of Barcelona, in Spain. It provides care to a population of 155 069 inhabitants according to the 2013 census.⁹ Ours is the only public system reference hospital in this county.

The group of patients older than 65 includes those aged 65 exactly.

In 1991, the neurology department of Hospital General de Vic created a register for the cases diagnosed with MG. All neurologists in the county of Osona, whether or not they work at our hospital, contribute to updating the register. The reference hospitals outside Osona have also been contacted to gather data on any patients with MG who may not have been treated in any public or private hospitals in that county. This register provides valuable data for cohort studies, whether clinical (treatments provided to these patients) or epidemiological (incidence, prevalence, and survival). The diagnosis of MG is established based on clinical signs and findings in the neurological examination, and confirmed by the presence of acetylcholine receptor (AChR) or muscle-specific receptor tyrosine kinase (MuSK) antibodies in serum. When serology tests yield negative results, the Tensilon test and a neurophysiological study (repetitive stimulation or single-fibre study) can corroborate the diagnosis.

The variables used in this study were the following: diagnosis of MG, sex, age (at the time of prevalence

Download English Version:

<https://daneshyari.com/en/article/8689638>

Download Persian Version:

<https://daneshyari.com/article/8689638>

[Daneshyari.com](https://daneshyari.com)