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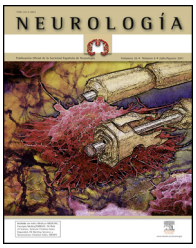

ORIGINAL ARTICLE

Idiopathic intracranial hypertension: descriptive analysis in our setting☆

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KEYWORDS
Headache;
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Abstract
Introduction: Idiopathic intracranial hypertension is a disorder characterised by increased intracranial pressure without evidence of an expansive intracranial process or cerebrospinal fluid cytochemical alterations.
Patients and method: We reviewed the medical records of patients with idiopathic intracranial hypertension admitted to our hospital between 1999 and 2009 and who met the modified Dandy criteria. We collected the following data: age, body mass index (BMI), outlet pressure of cerebrospinal fluid, cardiovascular history, imaging studies, treatment, and outcome.
Results: We analysed 61 patients (19 males and 42 females) with a mean age of 35.38 years. A BMI above the normal range was determined for 72.13% of the patients, although 47.37% of males showed normal weight. Fifty per cent of patients had a cardiovascular risk factor, especially dyslipidaemia, hypertension, and contraceptive drugs in women. Headache was the main presenting symptom, followed by visual field defects and other visual disturbances. Bilateral papilloedema was present in 81.96% of the patients.
Conclusions: The approximate incidence is 1.2/100 000 individuals/year. The condition is more common in young women with higher body weight and it is also associated with contraceptive drugs. Headache with bilateral papilloedema and impaired visual acuity stand out as the main symptoms. An interesting finding from this study is that male patients had a lower BMI, a lower incidence of headache and increased visual impairment.

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PALABRAS CLAVE
Cefalea;
Hipertensión intracraneal idiopática;
Índice de masa corporal;
Obesidad;
Papiledema;
Seudotumor cerebral

Hipertensión intracraneal idiopática: análisis descriptivo en nuestro medio

Resumen
Introducción: La hipertensión intracraneal idiopática es una entidad caracterizada por el aumento de la presión intracraneal sin evidencias de proceso expansivo intracraneal o alteraciones citoquímicas del líquido cefalorraquídeo.
Pacientes y método: Se revisaron las historias clínicas de los pacientes con hipertensión intracraneal idiopática ingresados en nuestro hospital entre 1999 y 2009, y que cumplían los criterios modificados de Dandy. Se recogieron datos de edad, índice de masa corporal (IMC), presión de salida de líquido cefalorraquídeo, antecedentes cardiovasculares, pruebas de imagen, tratamiento y evolución.
Resultados: Se analizaron 61 pacientes (19 hombres y 42 mujeres), con una media de edad de 35,38 años. El 72,13% de los pacientes mostraban aumento del IMC. Cabe destacar que el 47,37% de los varones mostraban normopeso. El 50% de los pacientes presentaban algún factor de riesgo cardiovascular, destacando la dislipidemia, la hipertensión arterial y el tratamiento con anticonceptivos en las mujeres. La cefalea era el principal síntoma de presentación, seguido de las alteraciones campimétricas y otros defectos visuales. El 81,96% de los pacientes presentaban edema de papila bilateral.
Conclusiones: La incidencia aproximada es de 1,2/100.000 habitantes/año, siendo más frecuente en mujeres jóvenes con aumento de peso y asociado a la toma de tratamiento anticonceptivo. Destaca la cefalea, con edema de papila bilateral y alteraciones de la agudeza visual como síntomas principales. Un dato interesante aportado por este trabajo es el menor IMC que se muestra en el sexo masculino, así como la menor presencia de cefalea y mayor afectación visual.

Introduction

Idiopathic intracranial hypertension (IIH) is a disorder characterised by an increase in intracranial pressure with no evidence of intracranial pathology. IIH was first described by Quincke. Dandy proposed the first diagnostic criteria for IIH in 1937 and Smith would later modify them in 1985.[1,2] Diagnostic criteria are generally based on signs and symptoms of intracranial hypertension and on increased intracranial pressure with no anomalies in the cerebrospinal fluid (CSF) and normal neuroimaging scans.[2,3]

Annual incidence in the general population[4] is 1-3 per 100 000 inhabitants aged between 15 and 44. This disorder is more frequent in young and obese women, with a male/female ratio of 1:8.[3–7]

The most frequently reported symptoms include headache (with no pathognomonic characteristics), nausea and vomiting, amaurosis fugax, visual field defects, diplopia, photopsia, and pulsatile tinnitus. Examination of the fundus of the eye normally reveals unilateral or bilateral papilloedema, and neurological examination usually yields normal results, with the exception of ophthalmoparesis of the sixth cranial nerve.[4,8]

There are cases of atypical pseudotumor cerebri; this is the term used for cases that fulfil each of the modified Dandy criteria in the absence of papilloedema.[9,10]

The aim of this study is to determine clinical and epidemiological characteristics of IIH among patients in our setting.

Patients and methods

We performed retrospective analysis of medical records from patients diagnosed with IIH who were admitted to the neurology department at Hospital Universitario de Nuestra Señora de Candelaria, between January 1999 and 31 December 2009. This is a tertiary care hospital that covers a healthcare district containing approximately 500 000 inhabitants.

We selected patients who met the modified Dandy criteria[2] (Table 1). For all patients, we collected data regarding age, sex, arterial hypertension, diabetes mellitus, dyslipidaemia, heart disease, tobacco use, relevant neurological history, and use of oral contraceptives. Since this was a retrospective analysis, no data regarding recent weight gain could be obtained. However, we were able to record presence/absence of obesity and patients' body mass index (BMI) according to current WHO criteria (Table 2). We also estimated initial CSF opening pressure, measured in cmH_2O. Cranial computed tomography was performed for all patients, and magnetic resonance imaging for 96.72%. Magnetic resonance angiography was necessary in 18.03% of the patients due to the atypical characteristics of the symptoms. Data for readmission, recurrence, resistance to treatment,

Table 1 Modified Dandy diagnostic criteria

- Symptoms of intracranial hypertension (headache, nausea, vomiting, transient vision loss, papilloedema)
- Absence of neurological focal signs, with the exception of unilateral or bilateral paralysis of the sixth cranial nerve
- Elevated opening pressure of the CSF with normal biochemical and cytological composition
- Symmetric ventricles of normal or small size, formerly assessed using ventriculography initially and currently measured with tomography