



ORIGINAL ARTICLE

Validity of the clinical and content scales of the Multiphasic Personality Inventory Minnesota 2 for the diagnosis of psychogenic non-epileptic seizures[☆]



A. del Barrio^{*}, A. Jiménez-Huete, R. Toledano, I. García-Morales, A. Gil-Nagel

Servicio de Neurología, Hospital Ruber Internacional, Madrid, Spain

Received 5 July 2013; accepted 11 December 2013

Available online 4 February 2016

KEYWORDS

Multiphasic
Personality Inventory
Minnesota 2;
Basic scales;
Content scales;
Psychogenic
non-epileptic
seizures;
Seizures

Abstract

Introduction: The use of the Multiphasic Personality Inventory Minnesota 2 (MMPI-2) for the diagnosis of psychogenic non-epileptic seizures (PNES) is controversial. This study examines the validity of the clinical scales and, unlike previous works, the content scales.

Methods: Cross-sectional study of 209 patients treated in the epilepsy unit. We performed a logistic regression analysis, taking video-electroencephalography as the reference test, and as predictor variables age, sex, IQ and clinical (model A) or content scales (model B) of the MMPI-2. The models were selected according to the Aikake index and compared using the DeLong test.

Results: We analysed 37 patients with PNES alone, or combined with seizures, and 172 patients with seizures only. The model consisting of sex, Hs (hypochondriasis) and Pa (paranoia) showed a sensitivity of 77.1%, a specificity of 76.8%, a percentage of correct classification of 76.8%, and an area under the curve (AUC) of 0.836 for diagnosing CNEP. Model B, consisting of sex, HEA (health concerns) and FRS (fears), showed a sensitivity of 65.7%, a specificity of 78.0%, a percentage of correct classification of 75.9% and an AUC of 0.840. DeLong's test did not detect significant differences.

Conclusions: The MMPI-2 has a moderate validity for the diagnosis of PNES in patients referred to an epilepsy unit. Using content scales does not significantly improve results from the clinical scales.

© 2013 Sociedad Española de Neurología. Published by Elsevier España, S.L.U. All rights reserved.

[☆] Please cite this article as: del Barrio A, Jiménez-Huete A, Toledano R, García-Morales I, Gil-Nagel A. Validez de las escalas clínicas y de contenido del Inventario Multifásico de Personalidad de Minnesota-2 para el diagnóstico de crisis no epilépticas psicógenas. Neurología. 2016;31:106–112.

^{*} Corresponding author.

E-mail address: adbarrio@ruberinternacional.es (A. del Barrio).

PALABRAS CLAVE

Inventario Multifásico de Personalidad de Minnesota 2;
Escalas básicas;
Escalas de contenido;
Crisis no epilépticas psicógenas;
Crisis epilépticas

Validez de las escalas clínicas y de contenido del Inventario Multifásico de Personalidad de Minnesota-2 para el diagnóstico de crisis no epilépticas psicógenas

Resumen

Introducción: La utilidad del Inventario Multifásico de Personalidad de Minnesota 2 (MMPI-2) para el diagnóstico de crisis no epilépticas psicógenas (CNEP) es controvertida. Este estudio analiza la validez de las escalas clínicas y, a diferencia de trabajos previos, las escalas de contenido.

Métodos: Estudio transversal de 209 pacientes atendidos en la unidad de epilepsia. Se realizó un análisis de regresión logística tomando como prueba de referencia la video-electroencefalografía y como variables predictoras edad, sexo, cociente intelectual y las escalas clínicas (modelo A) o de contenido (modelo B) del MMPI-2. Los modelos se seleccionaron según el índice de Aikake y se compararon con el test de DeLong.

Resultados: Se analizó a 37 pacientes con CNEP solas o combinadas con crisis epilépticas y 172 pacientes solo con crisis epilépticas. El modelo A, compuesto por sexo, hipocondría (Hs) y paranoia (Pa), mostró una sensibilidad del 77,1%, una especificidad del 76,8%, un porcentaje de clasificación correcta del 76,8% y un área bajo la curva (AUC) de 0,836 para el diagnóstico de CNEP. El modelo B, compuesto por sexo, preocupación por la salud (HEA) y miedos (FRS), mostró una sensibilidad del 65,7%, una especificidad del 78,0%, un porcentaje de clasificación correcta del 75,9% y un AUC de 0,840. El test de DeLong no detectó diferencias significativas.

Conclusiones: El MMPI-2 presenta una validez moderada para el diagnóstico de CNEP en los pacientes remitidos a una unidad de epilepsia. El uso de las escalas de contenido no mejora de forma significativa los resultados obtenidos con las escalas clínicas.

© 2013 Sociedad Española de Neurología. Publicado por Elsevier España, S.L.U. Todos los derechos reservados.

Introduction

Among patients who visit a general neurology clinic for the first time, 30% present medically unexplained symptoms.¹ In addition to ruling out neurological disorders, assessment of psychiatric and personality characteristics is a necessary step in diagnosing functional disorders. Psychogenic non-epileptic seizures (PNES) are of particular interest to many specialists due to the problems they pose from a diagnostic and therapeutic point of view and their major financial and social/familial consequences in addition to their impact on health. Patients with this type of seizures frequently visit healthcare centres and are at risk for unnecessary examinations and treatments. Meanwhile, delays in diagnosis prevent them from receiving the multidisciplinary treatment which could be beneficial.² The DSM-5 classification system includes PNES in the somatic symptom disorders category.³ It is believed that 10%-20% of patients diagnosed with epilepsy and up to 50% of the patients monitored in video-EEG (vEEG) units actually present PNES.⁴ Furthermore, 7%-32% of the patients with PNES experience or have experienced epileptic seizures (ES).

Psychological factors in patients with PNES have been studied using both projective and non-projective tests. These studies suggest the presence of a personality with a prior tendency to somatisation⁵ in association with avoidant, dependent, histrionic, and borderline personality disorders.⁶ While many different techniques are used to diagnose these disorders, we would like to highlight the Minnesota Multiphasic Personality Inventory (MMPI).⁷ However, validity studies on the MMPI and its second edition (MMPI-2)⁸ for the diagnosis of PNES have yielded contradictory results.

Some authors have reported sensitivity and specificity values higher than 80%,⁹ while others calculate them below 50%.¹⁰ Most of these studies have analysed basic clinical scales exclusively without considering content scales. Basic clinical scales screen for psychopathological symptoms as well as assessing the personality traits, interests, and preferences of the evaluated patient. Content scales provide additional information on singular symptomatic behaviours, less adaptive beliefs, and distorted thinking.

The main objective of this study is to create a logistic regression model able to identify patients with PNES among patients seen in an epilepsy unit. As our test of reference, we recorded seizure episodes using vEEG. The predictive variables were age, sex, IQ, scores on the MMPI-2 clinical scales, and, in contrast with other studies, scores on the MMPI-2 content scales.

Patients and methods

We performed a cross-sectional analysis of a series of 209 consecutive patients assessed within the framework of the epilepsy programme of the neurology department at Hospital Ruber Internacional in Madrid between 2000 and 2008.

Video-electroencephalography

All patients were studied with vEEG. Records were made with a digital acquisition system and stored on hard disk drives and video tapes. Durations ranged from 1 to 5 days. We used silver electrodes attached with collodion at the

Download English Version:

<https://daneshyari.com/en/article/3077098>

Download Persian Version:

<https://daneshyari.com/article/3077098>

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