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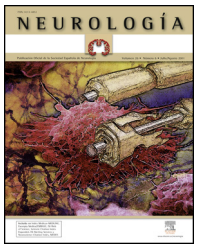

ORIGINAL ARTICLE

Factors determining when to start levodopa/carbidopa/entacapone treatment in Spanish patients with Parkinson's disease☆

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KEYWORDS
Parkinson's disease;
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Abstract
Introduction: Several therapeutic options are available for the symptomatic treatment of Parkinson's disease (PD). There is no reliable information about which factors are involved in the choice of treatment.
Objective: To identify factors contributing to the decision to start treatment with levodopa/carbidopa/entacapone (LCE) in patients with PD.
Patients and methods: We completed a descriptive cross-sectional retrospective multicentre study of patients with idiopathic PD receiving LCE. Clinical data were collected with special attention to factors that could potentially determine when to initiate treatment with LCE in normal clinical practice.
Results: We studied 1050 patients with a mean age of 71.3 ± 8.7 years (58.2% men). Average time from the onset of symptoms to diagnosis was 13.8 ± 12.9 months, with a latency time of 74.5 ± 53.6 months before starting LCE treatment. The most common initial symptoms were tremor (70.6%), reduced dexterity (43.2%) and slowness of movement (41.5%). At the start of LCE treatment, most patients were in Hoehn and Yahr stage 2 (57.5%), with an average rating of 73.4% on the Schwab and England scale. Eight hundred twenty-two patients (78.3%) received treatment with other drugs before starting LCE (mean time between starting any PD treatment and starting LCE was 40.5 ± 47.2 months). Clinical factors with a moderate, marked, or crucial effect on the decision to start LCE treatment were bradykinesia (84.7%), daytime rigidity (72.2%), general decline (72.2%), difficulty walking (66.4%), tremor (62.7%), nocturnal rigidity (56.1%), and postural instability (53%). Difficulty performing activities of daily living was the only psychosocial factor identified as having an influence on the decision (84.3%).

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◊ Members of the FAST Study Group are listed in Appendix A.

Conclusions: The decision to start patients with idiopathic PD on LCE treatment is mainly determined by motor deficits and disabilities associated with disease progression.

PALABRAS CLAVE
Enfermedad de Parkinson;
Levodopa/carbidopa/entacapona

Factores determinantes del inicio de tratamiento con levodopa/carbidopa/entacapona en pacientes españoles con enfermedad de Parkinson

Resumen
Introducción: La enfermedad de Parkinson (EP) cuenta con un tratamiento sintomático amplio. No existe información fidedigna sobre los factores que influyen en la elección del tratamiento.
Objetivo: Identificar los factores que determinan el inicio del tratamiento con levodopa/carbidopa/entacapona (LCE) en pacientes con EP.
Pacientes y métodos: Estudio observacional, transversal retrospectivo y multicéntrico en pacientes con EP idiopática en tratamiento con LCE. Se recogieron datos sobre factores potencialmente implicados, como determinantes del inicio del tratamiento con LCE en la práctica clínica habitual.
Resultados: Se estudió a 1.050 pacientes (edad media 71,3 ± 8,7 años; 58,2%, hombres), con 13,8 ± 12,9 meses de evolución hasta el diagnóstico y 74,5 ± 53,6 meses hasta el momento del inicio del tratamiento con LCE. Los síntomas iniciales incluyeron: temblor (70,6%), reducción de destreza (43,2%) y lentitud de movimientos (41,5%). El estadio de Hoehn y Yahr mayoritario al inicio de LCE fue 2 (57,5%), mientras que la escala de Schwab y England presentó una puntuación media de 73,4%. Ochocientos veintidós pacientes (78,3%) recibieron otros fármacos antes de LCE (tiempo medio entre inicio de tratamiento e inicio con LCE: 40,5 ± 47,2 meses). Los factores clínicos determinantes para iniciar el tratamiento con LCE fueron la presencia de bradicinesia (84,7%), rigidez diurna (72,2%), empeoramiento general (72,2%), dificultad marcha (66,4%), temblor (62,7%), rigidez nocturna (56,1%) e inestabilidad postural (53%). El único factor psicosocial determinante identificado fue la dificultad para realizar las actividades habituales de la vida diaria (84,3%).
Conclusiones: En la EP, el inicio del tratamiento con LCE viene determinado fundamentalmente por los déficits motores y la discapacidad asociada.

Introduction

Parkinson's disease (PD) presents with both motor symptoms (resting tremor, bradykinesia and rigidity) and nonmotor symptoms. In Spain, PD prevalence is estimated at 1.7% among patients older than 65 years,[1] although there are significant regional variations.[2]

Idiopathic PD accounts for approximately 85% of all the cases of parkinsonism diagnosed annually.[3] Its complex aetiology is linked to environmental and genetic factors, which probably explains the disease's heterogeneous progression profiles.[4] Within this context, patient subgroups with different pathogenic mechanisms may exist, and each group may require a personalised treatment approach.[5] While there is currently no proven neuroprotective treatment, powerful and efficient symptomatic treatments are available,[6] but there is no consensus on when or how to start pharmacological treatment.[6,7] Some studies suggest that early onset of treatment is beneficial to the patient's quality of life,[8,9] while most clinical practice guidelines recommend starting therapy when the first symptoms affecting daily life appear.[10] Furthermore, treatment choice is based on several factors that are related to the drug itself (efficacy, complications, safety, etc.), the patient profile (symptoms, age, occupation, comorbidity, etc.) and other circumstances (e.g., socioeconomic status).[11–13] This situation promotes uncertainty among patients and variability in clinical practice which has to do with lack of evidence.

Since not enough information is available on the factors influencing some therapeutic decisions made during the course of PD,[14] performing studies to identify such influences seems to be justified. There is currently no consensus on which factors are involved in the decision to start combination treatment with set doses of levodopa/carbidopa/entacapone (LCE), which is one of the more frequently used PD treatments. This retrospective study aims to identify the factors affecting the decision by Spanish neurologists to prescribe this treatment in normal clinical practice. To our knowledge, no other study with a similar aim has been carried out in our setting, and the results of our study may be useful for increasing knowledge in this field.

Patients and methods

We carried out an observational, cross-sectional, retrospective multicentre study in Spain under normal clinical practice conditions. Each participating neurologist recorded data from at least 10 patients treated with LCE until a total of 1050 eligible patients had been included. This sample size