



LETTER TO THE EDITOR

Advantages of using the optic nerve ecography to predict clinical progression in multiple sclerosis



Ventajas del uso de la ecografía del nervio óptico para predecir la progresión clínica en la esclerosis múltiple

Mr. Editor,

With great interest we have read the research by S. Pérez Sánchez et al., Entitled: "Usefulness of optic nerve ultrasound to predict clinical progression in multiple sclerosis", carried out in patients treated in the multiple sclerosis unit of the University Hospital Virgen Macarena of Seville, Spain¹.

Multiple sclerosis (MS) is an inflammatory and degenerative disease of the Central Nervous System (CNS) which affects the young adult population. The prevalence of this disease is heterogeneous in the world, being high in Europe and North America (prevalences that exceed 100 cases per 100,000 inhabitants) while it is low or intermediate in Latin American countries (prevalences between 1.5–38 cases per 100,000 inhabitants)^{2,3}.

Progressive neuronal and axonal loss is considered the most important cause of neurological disability in multiple sclerosis (MS), and the optic nerve is one of the most frequently affected structures; and results in a high degree of disability due to its negative impact on quality of life¹.

The use of ocular ultrasound determines the measurement of the thickness of the optic nerve in those patients with multiple sclerosis.

The strength of the study were those patients with multiple sclerosis evaluated by ocular ultrasound, the data obtained show good measurement precision, providing results that in comparison with other studies reveal to be similar.

A recent study showed that clinical ocular ultrasound can make a quick assessment and decide how to act in situations where time is of the essence. Ocular ultrasound is one of the most recently developed applications. In patients with severe non-traumatic ocular pathology, it has numerous clinically relevant uses: retinal detachment, central retinal artery occlusion or optic nerve pathologies, among others⁴.

In Peru, the National Institute of Neurological Sciences (INCEN) and other Private and Public Institutions apply this technique to patients with visual sensory diseases: infectious or inflammatory optic neuritis associated or not with multiple sclerosis.

In conclusion, ocular ultrasound can help predict the progression of MS disease, since the decrease in the diameter of the optic nerve is associated with clinical progression and greater disability, in addition this technique has advantages such as: it is non-invasive, reproducible and feasible to do with proper instruction.

The use of ocular ultrasound is recommended, being this a useful and helpful tool as a predictive factor for the progression of multiple sclerosis, also, scientific evidence is limited, so it may be an opportunity to start new studies of clinical research and corroborate the benefits of ocular ultrasound as a predictor of multiple sclerosis progression.

Declaration of conflict of interest

The authors have not reached any potential conflicts of interest with this letter to the editor.

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