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Optical coherence tomography as a biomarker of neurodegeneration in multiple sclerosis: a review.

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Abstract

Neurodegeneration is one the most important pathological factors which contributes to permanent disability in multiple sclerosis (MS). Optical coherence tomography (OCT) measurements of macular ganglion cell layer (mGCL) and retinal nerve fiber layer (RNFL) have been proposed as biomarkers of axonal damage in MS. The aim of this review is to describe the most relevant findings regarding OCT and axonal damage in MS. We have selected studies that describe retina impairment in MS patients, and those which quantitatively assess the relationship between OCT and physical disability, cognitive impairment and relationship between OCT and magnetic resonance imaging (MRI). Results show that there is a relationship between the degree of retinal layers reduction and physical or cognitive disability and degenerative changes in MRI.

Abstract

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