

Optical coherence tomography (OCT) study in Argentinean Huntington's disease patients.

Gatto E^{1,2}, Parisi V¹, Persi G¹, Fernandez Rey E³, Cesarini M³, Luis Etcheverry J³, Rivera P³, Squitieri F⁴.
Author information

Abstract

BACKGROUND:

Huntington's disease (HD) is a genetic, rare and progressive neurodegenerative disorder that causes motor and cognitive impairment in midlife patients. Although retinal damage was observed in animal HD models and in patients with other neurodegenerative diseases, we still need confirmation of impairment in HD patients. Optical coherence tomography (OCT) is a non-invasive methodology that analyses the retinal nerve fibre layers (RNFL) and could reflect processes of neurodegeneration.

METHODS:

A cross-sectional study with 14 HD patients who underwent a spectral domain OCT. Results were compared with a control group. Demographic data were also obtained.

RESULTS:

Temporal and superior RNFL sectors in HD showed a significant RNFL thinning compared with a control group. However, no differences were identified in mean total RNFL thickness between HD patients and controls.

CONCLUSIONS:

OCT is a rapid and non-invasive technique that can be investigated in larger cohorts of patients to assess its potential role as a biomarker in HD patients.

KEYWORDS:

Huntington; Optical coherence tomography; biomarkers; neurodegenerative; retina

PMID: 29912591