

## **Dysthyroid optic neuropathy: an unusual and severe presentation of thyroid ophthalmopathy**

**A. Contreras**, M. Palacios, A. Jose, Melgarejo Pedro  
*Neurología, Hospital Universitario Gregorio Marañón, Spain*

A 56-year-old male with cardiovascular risk factors, atrial fibrillation and ischemic heart disease, presented with progressive visual deficit in the right eye (RE), binocular diplopia and pain with the eye movements. Physical examination revealed proptosis, papilledema, and visual field deficits in the lower hemifield of RE, associated with limitation of the supraversion of RE and adduction of both eyes. The most probable diagnosis, was of orbital infiltrative / inflammatory pathology. In the analytical study during hospital admission, TSH and normal T4 with positive anti-TSH antibodies were highlighted. The microbiological and immunity study were negative. The cranial MRI showed bilateral exophthalmos, signal alteration and increase of bilateral orbital fat content and signal alteration and thickening of the right optic nerve. Based on the clinical, analytical and neuroimaging findings, a diagnosis of thyroid ophthalmopathy (OT) with dysthyroid optic neuropathy was made and intravenous corticotherapy was started, with good clinical evolution at discharge and in subsequent controls. The OT is an inflammatory and immune-mediated pathology that can be seen in up to 5% of cases, in euthyroid subjects. 3-7% of patients with OT present with visual involvement, in relation to optic neuropathy due to compression of orbital structures in apex and vascular congestion, being a marker of severity and activity of the disease. The importance of the dysthyroid optic neuropathy lies in the fact that, without treatment, it can lead to irreversible visual loss. An urgent intravenous corticotherapy at high doses is indicated, reserving decompressive surgery for those patients who do not respond to corticoid therapy. As a conclusion, OT is a relatively frequent cause of orbital pathology, although the involvement of the optic nerve occurs in a low percentage of cases, being an indication of urgent treatment. In our case, the early onset of treatment, after the diagnosis was made, led to the clinical improvement of the patient.