

# Idiopathic intracranial hypertension and optical coherence tomography

## Hipertensão intracraniana idiopática e tomografia de coerência óptica

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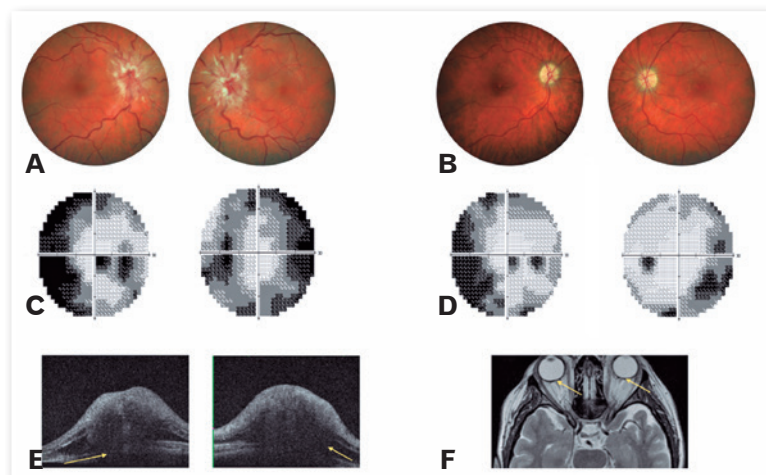
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Idiopathic intracranial hypertension (IIH) is a significant cause of papilledema, which is diagnosed based on ophthalmological evaluation, neuroimaging studies, and intracranial hypertension ( $>25\text{cmH}_2\text{O}$ ) on lumbar puncture<sup>1</sup>. IIH is usually associated with weight gain and should be differentiated from other conditions that cause intracranial hypertension, such as intracranial tumors, certain medications (e.g., tetracycline), and abnormalities in the cerebrospinal fluid (CSF) drainage system<sup>1</sup>. Accordingly, IIH treatment involves medications that reduce intracranial hypertension and weight<sup>2</sup>.

The following findings were compatible with IIH: CSF opening pressure of  $70\text{cmH}_2\text{O}$  on lumbar puncture, visual field constriction, optic disk swelling on fundus examination and optical coherence tomography (OCT), and flattening of the posterior ocular globe on OCT or magnetic resonance imaging (Figure 1).

The treatment comprised acetazolamide (250mg six times a day) and weight reduction measures (body mass index was reduced from 42 to  $35\text{kg/m}^2$ ). Post-treatment lumbar puncture revealed a CSF pressure of  $24\text{cmH}_2\text{O}$  with concomitant anatomical and functional improvement in the optic nerve (Figure 1).



**Figure 1.** (A) Pretreatment OD and LE disk swelling; (B) resolution of OD and LE disk swelling after treatment, (C) visual field RE and LE, respectively, pretreatment; (D) visual field RE and LE post-treatment; (E) pretreatment RPE/Bruch's membrane anteriorization visualized using optical coherence tomography; (F) flattening of the posterior ocular glob OD and LE on magnetic resonance imaging.

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