

# More than Bone Tissue

## Mais que Tecido Ósseo

 João Leite <sup>1</sup>,  Ana Marta <sup>1</sup>,  Maria João Furtado <sup>1,2</sup>, Natália Ferreira <sup>1</sup>

<sup>1</sup> Department of Ophthalmology, Centro Hospitalar Universitário de Santo António, Porto, Portugal

<sup>2</sup> ICBAS - Instituto de Ciências Biomédicas Abel Salazar, Porto, Portugal

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**PALAVRAS-CHAVE:** Choroid Neoplasms; Choroidal Neovascularization; Osteoma.

**KEYWORDS:** Neoplasias da Coroide; Neovascularização de Coroide; Osteoma.

A healthy, asymptomatic 19-year-old male patient presented with best corrected visual acuity of 20/20 bilaterally. On funduscopy, a white-orange lesion was observed, with well-defined borders, located superiorly and adjacent to the optic disc in the right eye.

During follow-up, choroidal neovascularization was suspected in the context of choroidal osteoma and an ocular ultrasound (which revealed a hyperechogenic plaque in the posterior pole), fundus autofluorescence, fluorescein angiography, EDI SD-OCT and OCT-A were performed and revealed to be useful in identifying a choroidal neovascular membrane.



**Figure 1.** Retinography of the fundus (A) showing a white-orange lesion, with well-defined borders, located superiorly to the optical disc. Fundus autofluorescence (B) showing a hypoautofluorescent area and fluorescein angiography (C) contrast diffusion; ocular ultrasound (D) revealed a hyperechogenic plaque in the posterior pole and EDI SD-OCT (E) and OCT-A (F) revealed subretinal fluid with the presence of neovascular membrane.

Multimodal assessment was essential to confirm the diagnosis of the tumor as well as of neovascular complications.

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JL: Original draft, literature research, review and editing.  
AM, MJF and NF: Review and editing, supervision.  
All authors approved the final version to be published.

JL: Rascunho original, pesquisa bibliográfica, revisão e edição.

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## REFERENCES

1. Alameddine RM, Mansour AM, Kahtani E. Review of choroidal osteomas. *Middle East Afr J Ophthalmol.* 2014;21:244–50. doi: 10.4103/0974-9233.134686.
2. Ahmadieh H, Vafi N. Dramatic response of choroidal neovascularization associated with choroidal osteoma to the intravitreal injection of bevacizumab (Avastin). *Graefe's Arch Clin Exp Ophthalmol.* 2007;245:1731–3. doi: 10.1007/s00417-007-0636-z.
3. Browning DJ. Choroidal osteoma: observations from a community setting. *Ophthalmology.* 2003;110:1327–34. doi:

10.1016/S0161-6420(03)00458-5.

4. Zhang L, Ran QB, Lei CY, Zhang MX. Clinical features and therapeutic management of choroidal osteoma: A systematic review. *Surv Ophthalmol.* 2023;68:1084–92. doi: 10.1016/j.survophthal.2023.06.002



**Corresponding Author/  
Autor Correspondente:**

**João Miguel Oliveira Leite**  
Ophthalmology Department,  
Centro Hospitalar Universitário  
de Santo António (CHUdSA)  
Largo do Prof. Abel Salazar  
4099-001 Porto, Portugal  
E-mail: leite.jmo@gmail.com



ORCID: 0000-0002-7071-2228