

# Kyrieleis Plaques: Multimodal Imaging with Optical Coherence Tomography Angiography

## Placas de Kyrieleis: Imagem Multimodal com Angiografia por Tomografia de Coerência Ótica

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**Recebido/Received:** 2021-05-10 | **Aceite/Accepted:** 2021-07-05 | **Publicado/Published:** 2021-12-31

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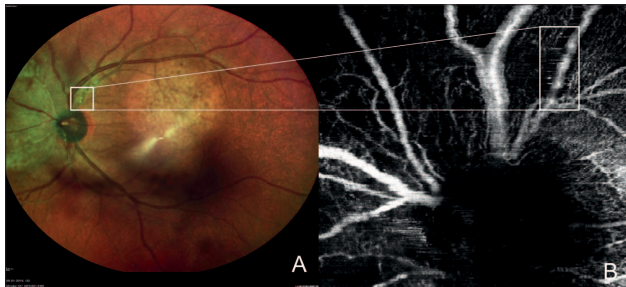
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DOI: <https://doi.org/10.48560/rspo.24574>

**KEYWORDS:** Retinal Diseases; Tomography, Optical Coherence; Toxoplasmosis.

**PALAVRAS-CHAVE:** Doenças da Retina; Tomografia de Coerência Óptica; Toxoplasmose.

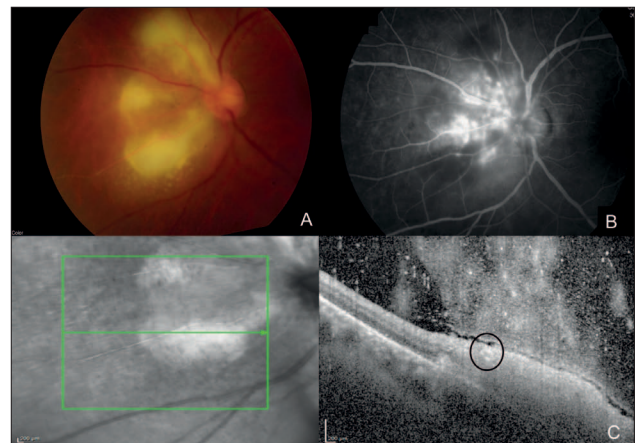
A 35-year-old immunocompromised male with Crohn's disease was diagnosed with Toxoplasmosis retinochoroiditis in the left eye. In the right eye, Kyrieleis plaques appeared in greater detail as green deposits in multicolor imaging (Fig.1A). OCT angiography showed segmental areas of decreased lumen diameter along the superotemporal arteriole in which Kyrieleis plaques were seen (Fig.1B). The funduscopy of the left eye revealed mild vitritis, areas of retinochoroiditis extending from the nasal edge of the optic disc, and Kyrieleis plaques along the length of retinal arterioles (Fig.2A). The fluorescein angiography showed leakage from the retinal vessels within the retinochoroiditis foci (Fig.2B). An optical coherence tomography (OCT) scan across an affected arteriole demonstrated a hyperreflective wall with



**Figure 1.** Kyrieleis plaques appeared in greater detail as green deposits in multicolor imaging (Fig.1A). OCT angiography showed segmental areas of decreased lumen diameter along the superotemporal arteriole in which Kyrieleis plaques were seen (Fig.1B).

normal reflectance lumen (Fig.2C).

Kyrieleis plaques, described in 1933,<sup>1</sup> are whitish segmented deposits scattered along the retinal artery branches, commonly associated with infectious uveitis.<sup>2,3</sup> There are no histopathologic studies to elucidate the nature of these lesions. They are thought to be caused by endothelial deposition of inflammatory debris within the vessel wall,



**Figure 2.** The funduscopy revealed mild vitritis, areas of retinochoroiditis extending from the nasal edge of the optic disc, and Kyrieleis plaques along the length of retinal arterioles (Fig. 2A). The fluorescein angiography showed leakage from the retinal vessels within the retinochoroiditis foci (Fig.2B). An optical coherence tomography (OCT) scan across an affected arteriole demonstrated a hyperreflective wall with normal reflectance lumen (Fig.2C).

sparing the lumen and not comprising the arterial flow.<sup>4,5</sup> To better characterize these lesions, multimodal imaging was performed in this case. OCT-angiography suggested a narrowed lumen in the location of Kyrieleis plaques, and these lesions were most visible in multicolor fundus imaging.

## PRESENTATIONS

Best poster in XXXIII Jornadas Internacionais de Oftalmologia, Porto.

## RESPONSABILIDADES ÉTICAS

**Conflitos de Interesse:** Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

**Fontes de Financiamento:** Não existiram fontes externas de financiamento para a realização deste artigo.

**Confidencialidade dos Dados:** Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

**Consentimento:** Consentimento do doente para publicação obtido.

**Proveniência e Revisão por Pares:** Não comissionado; revisão externa por pares.

## ETHICAL DISCLOSURES

**Conflicts of Interest:** The authors have no conflicts of interest to declare.

**Financing Support:** This work has not received any contribution, grant or scholarship.

**Confidentiality of Data:** The authors declare that they have followed the protocols of their work center on the

publication of data from patients.

**Patient Consent:** Consent for publication was obtained.

**Provenance and Peer Review:** Not commissioned; externally peer reviewed.

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