# Characterization of Dalén-Fuchs Nodules with Optical Coherence Tomography and Optical Coherence Tomography Angiography

# Caracterização de Nódulos de Dalén-Fuchs por Tomografia de Coerência Óptica e Angiografia por Tomografia de Coerência Óptica

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**PALAVRAS-CHAVE:** Segmento Interno das Células Fotorreceptoras da Retina; Tomografia de Coerência Óptica.

Dalén-Fuchs nodules (DFN) are hemispherical nodular lesions located beneath the retinal pigment epithelium (RPE) layer and consisting of lymphocytes, histiocytes and epithelioid cells.

Although a characteristic feature of sympathetic ophthalmia, DFN is not pathognomonic for this entity and has also been reported in Vogt-Koyanagi-Harada, sarcoidosis, and tuberculosis.

The first histological reports on DFN described three types of DFN and Fuchs's original hypothesis is that DFN undergo an evolutionary sequence of development.[1-2]

There is no established relationship between duration of disease and the morphological type of DFN and all three types of DFN can be present simultaneously.[3]

The aim of our work is to disclose the optical coherence tomography (OCT) morphologic appearance of the three types of DFN and the OCT-angiography role in the diagnosis of DFN complicated with inflammatory choroidal neovascularization.

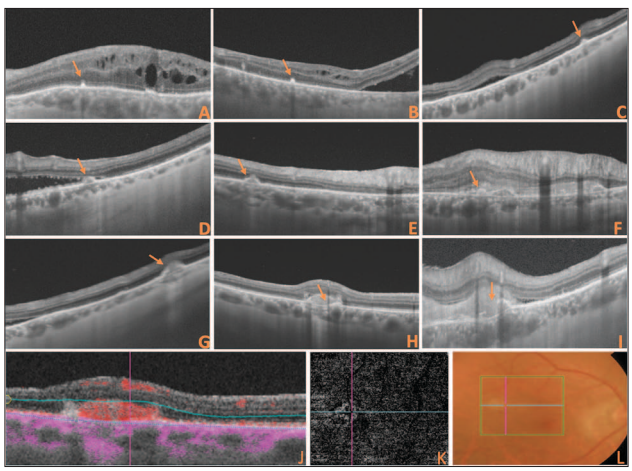


Figure 1. A-C: Type 1 DFN- Earliest DFN with focal hyperplasia and aggregation of RPE cells;
D-F: Type 2 DFN - Epithelioid cells and lymphocytes accumulation in a dome-shaped hyperreflective lesion.
G-I: Type 3 DFN - Interruption of Bruch's membrane and RPE. Degeneration of RPE cells at the dome with DFN's cells released into the subretinal space.
J-L: DFN complicated with inflammatory choroidal neovascularization - OCT-angiography will display the vascular structure within the DFN, this is particularly useful when there is no intraretinal or subretinal fluid as in Fig. J. On fundus photography the corresponding yellowish subretinal lesion (Fig. L).

## RESPONSABILIDADES ÉTICAS

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