Multiplexed optical coherence tomography imaging of optic disc drusen

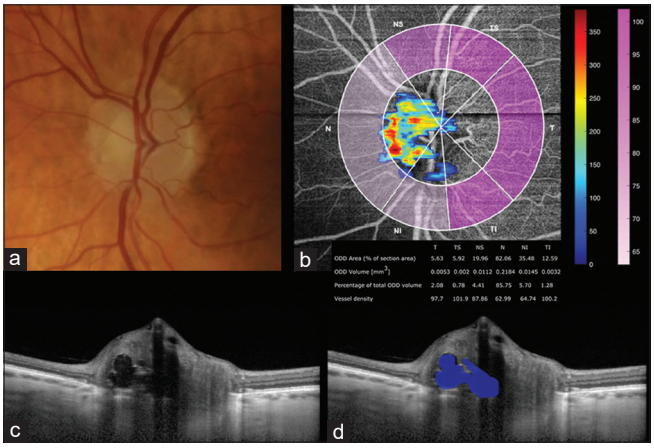

Figure 1: (a) Fundus photo of the left optic disc with visible ODD. (b) Corresponding en face OCT angiogram where the peripapillary region is divided into 6 Garway-Heath map sections. Each violet shade represents the vessel density within the section. The volume and location of the ODD is represented as a height map using a blue-red color scale. (c) Enhanced depth imaging OCT shows a characteristic hyporeflective structure with a hyperreflective rim consistent with ODD. (d) The segmented ODD is colored blue

Optic disc drusen (ODD) are calcified masses in the prelaminar optic nerve head seen in up to 2% of the population. Although the pathophysiology is not fully understood, altered microvascularization could both be part of the pathogenesis and a consequence of ODD.[1] We developed a method that combines information from optical coherence tomography (OCT) angiography regarding peripapillary vessel density along with information from enhanced depth imaging OCT about anatomical ODD location and volume [Fig. 1]. In this patient, the majority of the ODD volume is located nasally and in the adjacent peripapillary section wherein the vessel density is correspondingly lower.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Reference

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Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/ijo.IJO_607_20

Cite this article as: Karlesand I, Lindberg AS, Malmqvist L, Rueløkke LL, Hamann S. Multiplexed optical coherence tomography imaging of optic disc drusen. Indian J Ophthalmol 2020;68.2531.