

# Double trouble: Optic disc pit maculopathy in advanced glaucoma

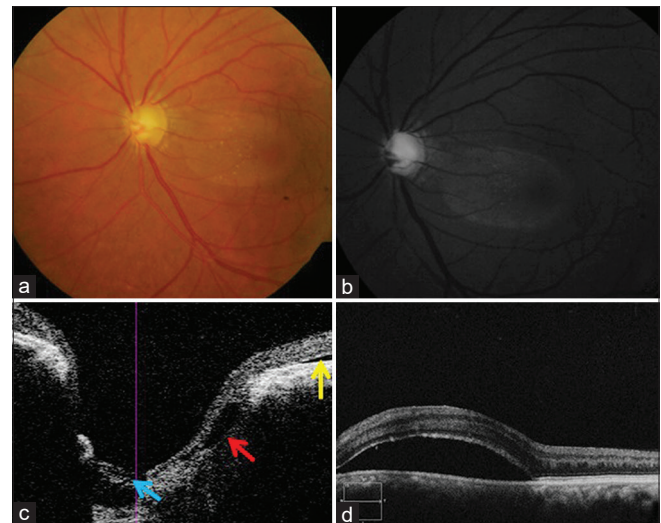
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**Key words:** Glaucoma, OCT, optic disc pit maculopathy, optic disc pit

A 56-year-old male presented with complaint of diminution of vision in both eyes (OU) for one year. On examination, the corrected distant visual acuity in the right (OD) and left (OS) eye were 20/200 and HM+ respectively. The intraocular pressure were 20 mmHg and 22 mmHg in OD and OS, respectively, with topical anti-glaucoma medications. OU anterior segment evaluation revealed shallow anterior chamber with patent iridotomy and clear lens. OU fundus evaluation showed advanced glaucomatous cupping with OS serous macular detachment. With no other obvious cause that could explain the maculopathy, we suspected an occult disc pit that could have led to the serous detachment and performed optical coherence tomography (OCT) to study the disc morphology in greater detail. Details of the OCT performed through optic nerve head and macula are depicted in Fig. 1.

## Discussion

Between 25%–75% of patients with optic disc pit (ODP) develop maculopathy defined as macular changes that occur in conjunction with a pit including intraretinal and subretinal fluid accumulation, and retinal pigment changes.<sup>[1–3]</sup> ODP is found in majority of the cases with ODP maculopathy (ODP-M). Rarely, ODP may not be obvious on clinical examination as in this case where the pit had been obscured due to progressive enlargement of the cup. OCT is an excellent tool in such atypical cases to study the disc morphology and assess the structural abnormalities. Presence of anomalous cavitation within the disc stroma and a membrane running across the cavity are characteristic OCT signs suggestive of ODP.<sup>[4,5]</sup> An incomplete membrane in the present case possibly allowed seepage of liquified vitreous leading to neurosensory detachment at the macula. Identifying these classical imaging signatures can help diagnose ODP and its sequelae in eyes with glaucomatous cupping.



**Figure 1:** (a-d): (a) Fundus photo of left eye depicting advanced glaucomatous cup with neurosensory detachment and pigmentary changes over foveal area. (b) Red free image clearly delineating the area of neurosensory detachment. (c) HD-OCT across the left optic disc shows a deep cup with multiple cavities within the stroma (red arrow), an incomplete membrane across the cup (blue arrow) and continuation of the serous detachment up to the temporal margin of the optic nerve head (yellow arrow). (d) HD-OCT scan of the left macula showing a serous macular detachment

## Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

## Conflicts of interest

There are no conflicts of interest.

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