Anterior Ischemic Optic Neuropathy secondary to Optic Nerve Head Drusen

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CASE PRESENTATION

• A 24 year old patient was referred to the Outpatient Department for reevaluation due to non arteritic ischemic optic disc neuropathy (NA-ION) associated with optic disc drusen (ODD).
• Patient reported history of sudden painless vision loss on the right eye.

CLINICAL EXAMINATION

• BCVA was NLP and 2/10cc in the right and left eye respectively.
• Pupils were equal, reactive to light.
• Colour Vision testing was normal.
• The IOP was 14 on both eyes.
• Fundus examination revealed bilateral ODD
• ODD were demonstrated markedly hyperfluorescent in autofluorescence imaging (Fig.1)
• No other pathological fundus findings were noticed.
OCT revealed peripapillary RNFL thinning (Fig. 2).

Visual field testing was amaurotic on the OD and annular scotoma occurred in the OS (Fig. 3).

The above findings were consistent with NA-ION on the right eye.

Other laboratory tests (CRP, TKE) and brain MRI came back normal.
CONCLUSIONS

• The prevalence of ODD is estimated at 2% in general population and have been implicated as a cause of NA-ION.

• Drusen are believed to directly damage the RNFL by axonal compression and indirectly cause ischemia in the RNFL as a result of vascular compression.

• Therefore, clinicians should be aware of this rare association and clinical suspicion of DDS in young patients with NA-ION should be promptly established.

• On the presenting case the patient was informed about the high risk of possible ischemic complications on the left eye as well and the necessity of frequent follow-ups in the future.

Fig. 4 Fundus image of the right eye.