Research Paper

Volume : 4 | Issue : 1 | January 2015 • ISSN No 2277 - 8179

Case report of Bilateral Non arteritic – Anterior Ischemic Optic Neuropathy.

Medical Science

KEYWORDS : Bilateral Nonarteritic Anterior ischaemic optic neuropathy , Altitudinal field defect , Optic disc edema , Hypermetropia , Hypertension , Hypercholesterolemia

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ABSTRACT

Nonarteritic anterior ischaemic optic neuropathy (NAION) is the second most common optic neuropathy in adults. Fellow eye involvement is estimated to occur in 12–19% by 5years after onset. Here our patient presented with non arteritic AION after 17 years in the fellow eye.

Case report:

A 62-year-old man, came to our out patient department govt general hospital Guntur , Andhrapradesh with complaint of defective vision of left eye while getting down the stairs and to approach for things on the table from one month. Onset of defective vision is sudden and painless. He has similar complaint in right eye 17 years back and was treated with intravenous methylprednisolone. He is known hypertensive from 5 years with regular treatment. His best corrected visual acuity is 6/9 for right eye and 6/12 in left eye. Color vision is defective. Pupil reactions showed Relative Afferent Pupillary Defect in both eyes. Intra ocular pressure is 14 mm Hg in both eyes. Right eye fundus showed Superior Sectoral Atrophy at Optic Disc. Left eye optic disc is edematous and hyperemic with splinter hemorrhages at disc margin. On confrontation there is constriction of Visual field on inferior side in both eyes. Perimetry test (Humphrey System, program 30-2) showed Inferior Altitudinal field defect in both eyes. ESR , CRP , and Blood sugar test were normal. He is diagnosed as Non Arteritic Anterior Ischemic Optic Neuropathy in Left eye .

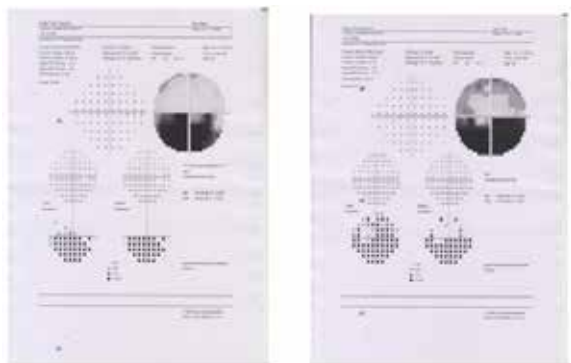
Discussion :

NA-AION is a severe form of visual impairment that is currently one of the main causes of visual deterioration in adults with an estimated yearly incidence up to 12-15 per 6000 people. It is generally recognized as an acute ischemic disorder of the ONH but could also be characterized by repeated events leading to a permanent visual impairment. This could also be due to some underlying systemic diseases such as diabetes, anemia, arterial hypertension, vasculitis, use of oral contraceptives or migraine. According to the literature, the ischemic damage could also be subclinical in some cases. It is demonstrated that in cases of NA-AION the risk of involvement of the second eye is about 12 -19 %, calculated on a 5 year-follow-up . A sudden and painless deterioration of vision, usually discovered on awaking in the morning, and a visual field defect are main clinical presentation symptoms of NAAION. Patient may complain of intermittent blurred vision. Colour vision is usually affected and the presence of a RAPD could be a significant clinical sign of optic neuropathy. Optic disc oedema (ODE) is a well-established initial clinical sign of acute NA-AION .The optic disc swelling may be more marked in one part of the disc than the other and splinter haemorrhages may be present at the disc margin very frequently. Gradually, as soon as the oedema decreases, the optic disc becomes pale.

Conclusion :

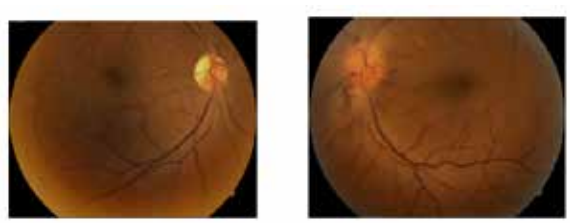
Here our patient presented with fellow eye involvement after 17 years. This patient

showed a typical clinical outline of a multifactorial disease with several risk factors including age, systemic hypertension, hypercholesterolaemia, and a small optic cup-to- disc ratio.



(Fig 1a) (Fig 1b)

Fig 1a : Right Eye Inferior Altitudinal Field Defect
Fig 1b : Left Eye Inferior Altitudinal Field Defect



(Fig 2a) (Fig 2b)

Fig 2a : Right Eye Fundus Superior Sectoral Atrophy
Fig 2b : Left Eye Fundus Disc Oedema

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