ABSTRACT

AIM OF THE STUDY

To assess the clinical profile of cases of unilateral disc edema

To assess the causes of unilateral disc edema, age of presentation, sex preponderance, systemic associations, risk factors, treatment and prognosis.

MATERIALS AND METHODS

30 cases of unilateral disc edema attending squint and neuroophthal clinic of Regional Institute of Ophthalmology and Government Ophthalmic Hospital were included in the study. Patients presented with unilateral disc edema, both males and females of age 20 - 65 year were included in this study. Patient with bilateral presentation, papilledema and patients of age <20 years were excluded from the study. Patients presenting to Squint & Neuro Ophthalmology services were registered, evaluated and followed up during the study period. Detailed history of present illness was taken. Visual acuity was measured using Snellen’s acuity chart and converted to logmar for the purpose of statistical analysis. The patients were also done slit lamp bio microscopy of anterior segment, fundus with +90D lens. Intraocular pressure, direct and Indirect Ophthalmoscopy, fields using automated perimetry, colour vision using ishihara chart, Blood investigations (Total count, Differential count, Erythrocyte sedimentation rate, VDRL, Mantoux, blood sugar, fasting lipid profile), blood pressure and radiological imaging [chest X-Ray, MRI Brain, Orbit, Spine (if needed)].

The work up for unilateral disc edema should be individualized based on the history and the examination finding. The management and prognosis depends upon the etiology of the disc edema.
RESULTS

In our study, the most common cause of unilateral disc edema is anterior ischemic optic neuropathy [53.33%] and next common is optic neuritis [16.67%]. Only type of AION presented to our clinic is NonArteritic type of AION. 68.8% of NAION is associated with systemic illness, out of which 25% has DM [diabetes], 12.5% has hypertension and 31.3% has both DM and HT. Carotid Doppler study of 93.75% of patient with NAION showed a normal study, whereas only 6.25% of patient with NAION showed an insignificant stenosis in contralateral eye. Fellow eye involvement is seen in 12.5% of patients with NAION. The visual prognosis of NAION is very poor. All cases of optic neuritis showed improvement with intravenous steroids but it did not alter natural course of the disease.

CONCLUSION

If a patient with unilateral disc swelling presents to neuro-ophthalmology clinic, NAION [Non Arteritic Anterior Ischemic Optic Neuropathy] and ON [optic neuritis] should be considered first in the differential diagnosis. Differentiating NAION and ON is very essential as the treatment is entirely different for each condition. Other causes of disc edema should not be missed. A detailed history taking, visual field, colour-vision and imaging tests [if needed, depending upon the cause of disc edema] should be performed for each and every case of unilateral disc edema. Regular follow-up examination would be necessary for all cases to look for visual recovery and recurrence.

KEY WORDS: Disc edema, Non Arteritic Anterior Ischemic Optic Neuropathy, Optic Neuritis