ISSN No:-2456-2165

# Pseudotumour Cerebri without Papilledema in a Healthcare Worker

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**Abstract:- Papilledema is a cardinal feature of Idiopathic intracranial hypertension (IIH)But in atypical scenarios IIH without papilledema (IIHWOP) can also exists. We report a case of Pseudotumor cerebri without papilledema in a healthcare worker who presented to our outpatient department with a severe occipital headache,tinnitus and photopsia.her dilated fundoscopy showed normal fundus with no signs of papilledema.Her laboratory reports were normal but Magnetic Resonance Imaging (MRI) and Magnetic Resonance Venography (MRV)of brain showed features suggestive of IIH.We referred her to neurologist for further management and they did lumbar puncture in lateral decubitus position showed raised cerebrospinal fluid (CSF)opening pressure and CSF analysis showed normal results.Hence she was diagnosed with IIHWOP according to Friedman's criteria and started on topiramate 25mg and Beta Cap 40mg medications. She was symptomatically relieved after 2 months of medications and we asked her for further follow up for fundoscopy,color vision and Intraocular pressure (IOP).**

***Keywords:-*** *Idiopathic intracranial hypertension(IIH) , Papilledema , Magnetic resonance venography (MRV),Lumbar puncture , cerebrospinal fluid (CSF),Topiramate.*

## I. INTRODUCTION

Pseudotumor cerebri is also known as Idiopathic intracranial hypertension (IIH) is characterized by headache ,papilledema ,minimal or absent of focal neurological signs and normal cerebral spinal fluid (CSF) findings.IIHWOP (Idiopathic intracranial hypertensison without papilledema) patients comprise a subset of patients with symptoms of intracranial hypertension,neuroimaging findings suggestive of raised ICP and demonstration of elevated CSF opening pressure by lumbar puncture,but normal fundoscopy without papilledema or optic atrophy.

## II. CASE REPORT

A 27 year old female patient who is a healthcare worker by occupation presented to our centre with severe occipital headache, throbbing type since 2 months associated with photopsia, tinnitus.It was not relieved by analgesics or by sleep. The patient gave a past history of migraine attacks which was treated 5 years ago. On examination her best corrected visual acuity (BCVA) was 20/20 for distance (with -1.5 sph -1.5 cyl × 180º) N6 for near in the right eye; 20/20 for distance (with -1.5 sph -1.5 cyl × 180º) and N6 for near in the left eye. Ischiara colour vision test showed normal in both eyes. Her anterior segment was unremarkable. Gonioscopy showed open angles. IOP was 12mmHg and 14mmHg in right and left eye respectively. Fundus examination showed 0.4 cupping and normal fundus in both eyes with no signs of papilledema.As shown in figure1 and figure 2. The OCT of optic nerves supported the abscence of papilledema the c/d ratio was 0.41 and 0.44 in the right eye and left eye respectively. The OCT of macula was within normal limits in both eyes. The visual fields is not done as the patient was not co-operative and was complaining of severe headache.Physical examination and systemic examination were unremarkable. The patient had an MRI, MRV of brain which showed B/L transverse sinus stenosis and distended prominent perioptic spaces. There was increased CSF around optic nerves associated with empty sella tursica which suggested an possibilty of Idiopathic ICT .Other laboratory investigations like CBC, ESR, LFT, RFT, Thyroid function tests, CRP were all normal. We referred the patient to Neurologist for further management and lumbar puncture was done on the patient with lateral decubitus position and the opening pressure was more than 25cm $H_2O$ and CSF analysis showed colourless CSF clear with no abnormal/atypical cells seen. CSF glucose and protien level was normal.Hence, patient was diagnosed with IIH without papilledema according to Friedman's Criteria. The patient was treated with Topiramate 25mg BD and Beta cap TR 40mg OD oral medications. The patient was symptomatically relieved after 2months and was asked for monitoring colour vision and IOP.

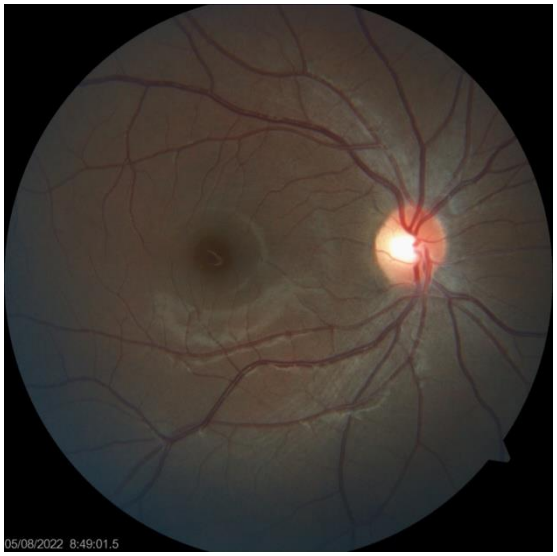

Fig. 1: OD

ISSN No:-2456-2165

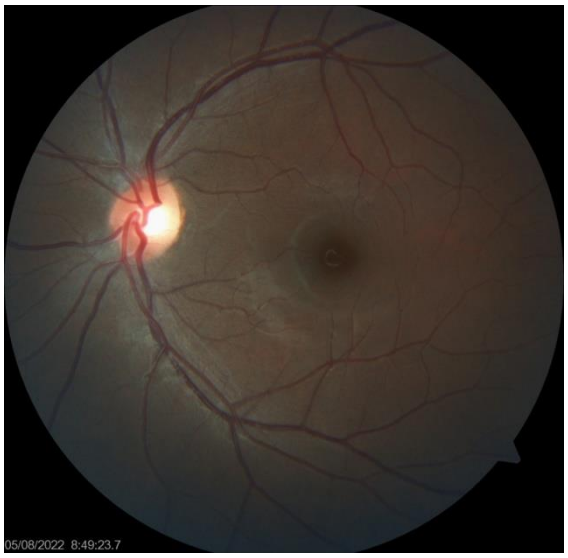

Fig. 2: OS

FIGURE 1. AND 2. SHOWING BOTH EYE NORMAL FUNDUS WITH NO SIGNS OF PAPILLEDEMA..

## III. DISCUSSION

In a study of 353 cases of IIH, Digre KB *et al.* also found 5.7% cases of IIH without papilledema (IIHWOP).Hingwala *et al*. found perioptic nerve sheath distension in 95.2% and empty sella in 76.2% IIH cases.In another prospective observational study, Favoni *et al.* reported a prevalence of 2.5% of IIHWOP in patients with chronic refractory headache.Although the risk of permanent visual loss may be lower in IIWOP than IIH population as a whole; thus those patients should receive careful baseline and followup evaluation by an ophthalmologist.

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