Posner Schlossman syndrome

Arvind R[1], Y Sowmya[2], Jaganmohan Rao[3]

[1]Associate Professor, [2]Postgraduate student,[3]Senior resident, Department of Ophthalmology, Prathima Institute of Medical Sciences, Nagunur, Karimnagar, Telangana, India

Address for Correspondence: Dr.Arvind R , Associate Professor, Department of Ophthalmology, Prathima Institute of Medical Sciences, Karimnagar, Telangana, India.

Email: arvind_kmc@yahoo.co.in

ABSTRACT

Posner Schlossman Syndrome (PSS), otherwise known as glaucomatocyclitic crisis, is an uncommon form of open angle glaucoma. This unilateral condition typically affects young to middle-aged individuals and is characterized by recurrent episodes of mild, nongranulomatous anterior uveitis with markedly elevated intraocular pressure (IOP). Some patients may have associated systemic disorders, mostly of allergic and gastrointestinal origin. A possible role of herpes simplex virus infection has also been postulated. PSS is characterized by recurrent, unilateral attacks of acute ocular hypertension associated with a mild anterior uveitis. It was first described by Posner and Schlossman in 1948. Although intraocular pressure is severely elevated, the anterior chamber angle is open. Ocular hypertension mostly becomes normal after 1 month with reduction of ocular inflammation. IOP is normal in the convalescent stage. An acute elevation of IOP is accompanied by or followed within a few days by a mild, often symptomless uveal inflammation. The mild nature of the uveitis at presentation of the first attack may go undetected. Medical treatment is indicated to prevent pressure-related optic nerve damage and to reduce inflammation. We here present a case of PSS in a 23 years old female patient which is a rare condition.

Keywords : Posner Schlossman syndrome, Glaucomatocyclitis crisis, Intraocular pressure, Inflammation, Visual field.

INTRODUCTION

Posner and Schlossman first reported 9 patients who suffered from recurrent unilateral attacks of ocular hypertension with mild anterior chamber inflammation and coined the term Glaucomatocyclitis crisis in 1948[1,2]. It was characterized by unilateral recurrent attacks of mild discomfort and blurring of vision, mild anterior chamber reaction or fine keratic precipitates with increased IOP and open angles on Gonioscopy. Each episode lasts for several hours to weeks with normal IOP and no signs of inflammation between the attacks. Visual field and optic discs appear to be normal.

CASE REPORT

A 23 years old female patient presented to ophthalmology OPD with complaints of left sided headache since one month, it was sudden in onset and was associated with redness, watering, photophobia and blurring of vision. There were about 8-10 episodes, each lasted for 1-2 days with asymptomatic period between the attacks. Patient had consulted a local ophthalmologist who advised her oral analgesics and topical antiglaucoma drugs and referred to us for further management. On examination Best corrected visual acuity (BCVA) in Right eye (RE) was 6/6 and in Left eye (LE) was 6/9 .

Slit lamp examination showed normal anterior segment findings in RE. In left eye there was mild lid edema, conjunctival congestion, mild corneal edema, fine keratic precipitates in inferior part of cornea. Peripheral anterior chamber depth was more than half of corneal thickness and anterior chamber showed grade 2 flare and cells. Pupil was middilated and sluggishly reacting. Intra Ocular Pressure in right eye was 18mmHg and in left eye was 38 mmHg. Patient was provisionally diagnosed as Posner Schlossman syndrome and started on oral Acetazolamide 250mg 3 times a day, topical anti glaucoma medication Brimonidine eye drops 3 times a day, and topical steroids every 2 hourly in left eye and followed after 3 days. On follow up patient was symptomatically better and there was decrease in signs like lid edema, conjunctival congestion, corneal edema and anterior chamber inflammation. IOP was 14 mmHg in right eye and 22 mmHg in left eye.

Gonioscopy revealed open angles and Humphrey's visual field test showed no obvious visual field defects. Dilated fundus examination was done which showed clear media and normal optic disc, macula and peripheral retina. Patient was again followed after 1 week, on examination both eyes anterior segment were within normal limits. IOP was 14 and 16 mm of Hg in right and left eye respectively. Patient was advised to continue topical antiglaucoma medication and topical steroids

were tapered over a period of month. Patient was followed regularly for IOP measurement and any signs of inflammation. Gonioscopy, Humphrey's visual field test and dilated fundus examination was repeated every 6 months for any glaucomatous optic disc changes and visual field defects. On repeated follow-ups patient's IOP was within normal limits and there was no obvious optic disc and visual field defects. [Figure 1& 2]

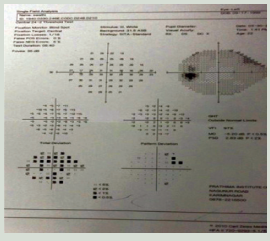

Figure 1: : Photograph showing visual field of left eye with few depressed spots.

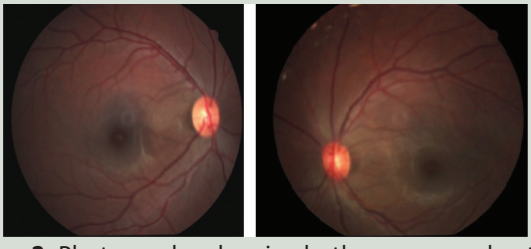

Figure 2: Photographs showing both eyes normal optic disc with normal retinal nerve fibres and Macula.

DISCUSSION

Posner Schlossman syndrome is a rare disease with recurrent attacks of acute, unilateral raised intraocular pressure and mild intraocular inflammation. It typically affects patients between second and fourth decades. Patient presented here was a 23 years old female with typical history of recurrent attacks with asymptomatic period between the attacks. Typical clinical signs of increased IOP, mild anterior chamber reaction and response to topical steroids and antiglaucoma medications helped in clinching the diagnosis of Posner Schlossman syndrome.

Diagnosis of Posner Schlossman syndrome can be easily missed because of the mild inflammatory nature of the disease[7].

Posner Schlossman syndrome should be differentiated from Acute angle closure glaucoma, Primary open angle glaucoma and Fuchs heterochromic uveitis. Acute angle closure glaucoma was ruled out as Gonioscopy revealed open angles. Primary open angle glaucoma was ruled as signs of inflammation are usually absent and it is typically a bilateral disease with raised IOP, open angles, optic disc and visual field changes. Primary open angle glaucoma is commonly seen in older age group patients. Fuchs heterochromic uveitis can be ruled out due to absence of heterochromia and stellate keratic precipitates.

Posner Schlossman syndrome responds well to topical steroids and antiglaucoma medications. Systemic antiglaucoma agents like Hyperosmotic agents and Carbonic anhydrase inhibitors can be used to reduce IOP in acute attacks[8]. Trabeculectomy may be done, if IOP is not under control with maximum medical therapy and patient developing glaucomatous optic disc damage and visual field defects. Treatment of Posner Schlossman syndrome is aimed at controlling intraocular pressure and decreasing inflammation. Topical Beta-blocker such as Timolol, Alpha- agonists such as Brimonidine, Apraclonidine and Carbonic anhydrase inhibitors such as Dorzolamide and oral Acetazolamide can be used as first line agents[3,4]. Topical steroids are used to control the inflammation. Posner Schlossman syndrome was thought to be benign disease as most of the patients recover without long term sequelae, however a number of patients with repeated attacks, even on treatment showed glaucomatous changes of the optic disc and visual fields[5]. Trabeculectomy may be considered, if IOP cannot be controlled with maximum medical therapy or signs of glaucomatous optic nerve damage and if visual field defects appear[6].

Jap A reported that patients with Posner Schlossman syndrome may develop secondary chronic open angle glaucoma. 26.4% of 53 cases of Posner Schlossman syndrome developed secondary chronic open angle glaucoma. Patients with more than 10 years of repeated attacks have 2.8 times more risk of developing glaucoma.

CONCLUSION

We here present a rare case of Posner Schlossman syndrome in a young female and the need of follow up regularly to check for any glaucomatous changes.

REFERENCES

1. Posner Schlossman syndrome A. "Syndrome of unilateral recurrent attacks of glaucoma with cyclitic symptoms." Archieves of Ophthalmology.1948 Apr; 39(4): 517-35.
2. Posner Schlossman syndrome A. "Further observation on the syndrome of glaucomatocyclitis crisis." Trans Am Acad Ophthalmol Otolaryngol.1953;57:531.
3. Muthusamy P."Apraclonidine in the management of glaucomatocyclitic crisis". Eye. 1994; 8(Pt3):367-68.
4. Hong C, Song KY. "Effect of apraclonidine hydrochloride on the attack of Posner Schlossman syndrome." Korean Journal of Ophthalmol.1993 Jun; 7(1):28-33.

5. Jap A, Sivakumar M, Chee SP. "Is Posner Schlossman syndrome benign?" Ophthalmology. 2001 May;108(5):913-18.

6. Hung PT, Chang JM. "Treatment of glaucomatocyclitic crises." American journal of ophthalmology. 1974;77:169-172.

7. Green RJ. Posner - Schlossman syndrome. Clinical Experimental optometry 2007; 90:53-56.

8. Kanski J. Clinical ophthalmology. A Systematic Approach 6th Edition London Butterworth Heinemann Elseiver. 2007;124-25.

Please cite this article as: Arvind.R, Sowmya, Jaganmohan. Posner Schlossman Syndrome. Perspectives in medical research 2016;4:1:49-51.

Sources of Support: Nil,Conflict of interest:None declared