Case Report

Sympathetic Ophthalmitis

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Sympathetic ophthalmitis is a rare bilateral granulomatous panuveitisoccurring after ocular penetrating trauma most frequently associated with uveal tissue prolapse. It can also occur following ocular surgery like cataract, vitrectomy, trabeculectomy, retinal detachment surgery and even after laser photocoagulation. Incidence varies between 0.05% to 0.2% following penetrating trauma and 0.01% following ocular surgery.

Key words: Sympathetic Ophthalmitis, Granulomatous panuveitis.

Sympatheticophthalmitis is a rare bilateral granulomatous panuveitisrarely occurring after ocular penetrating trauma most frequently associated with uveal tissue prolapse[1]. It can also occur following ocular surgery like cataract, vitrectomy, trabeculectomy, retinal detachment surgery and even after laser photocoagulation. Incidence varies between 0.05% to 0.2% following penetrating trauma and 0.01% following ocular surgery[2].

With the improvement of microsurgical technique and early enucleation the incidence of the sympathetic Ophthalmitis has decreased. It is very important to diagnose this blinding condition early to avoid visual threatening complication.

CASE REPORT

Forteen year old young boy presented in theOut patient Clinic with the complaint of right painful gradual and progressive decrease in vision for two weeks. Past ocular history is significant for trauma in the left eye with a fire cracker 3 months back. He underwent open globe repair within 24 hours of injury.

On examination patient had counting fingers at 3 feet in the right eye and no perception of light in the left. Right eye showed sluggish pupillary response. The pupil of the left eye was not appreciable. The patient also had a positive reverse Marcus gun. Slit lamp examination showed mutton fat keratitic precipitates mainly involving the inferior part along with grade 3 cells and flare in the right eye (Figure 1) and a repaired corneoscleral tear in the left (Figure 2). Right eye intraocular pressure was 14 mmHg and the left eye was phthiscal.The posterior segment in either eye was not visible.

Complete blood picture, Erythrocyte sedimentation rate, Chest X-ray, venereal disease research laboratory (VDRL), Toxoplasmosis Ig G and M, Montoux test and serum Angiotensin converting enzyme level, were ordered and found to be within normal limits. Sympathetic ophthalmitis was diagnosed.

The patient was started on oral Prednisolone in divided doses (weight adjusted) under cover of antacid, Predforte eye drops every 4 hourly and 1% Atropine eye drops twice a day.

On the 2nd week follow up the best corrected visual acuity improved to 6/18 with quite and maintained anterior chamber and no keratic precipitates. Intra-ocular pressure was 16 mmHg. The posterior segment showed disc edema and a dull foveal reflex (Figure 3). The treatment was continued.

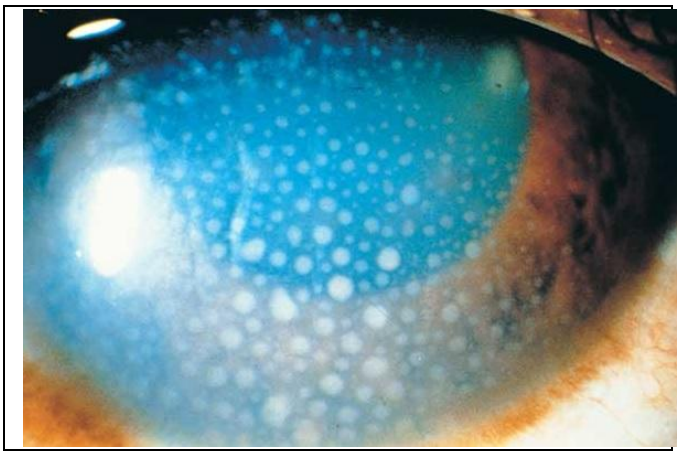

Fig. 1: Right eye showing mutton fat keratitic precipitates more inferiorly.

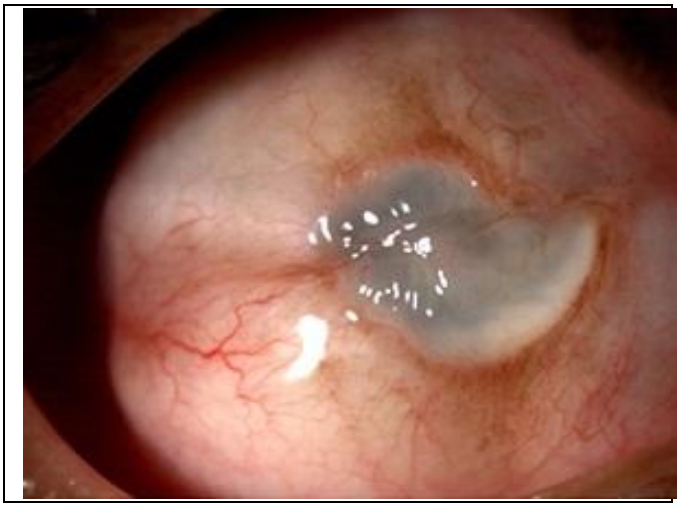

Fig. 2: Left eye shows a pthysical eye with a corneoscleral tear repair.

At 1 month follow up visit, the best corrected visual acuity improved to 6/9 and anterior segment was quite with resolving disc and macular edema. Topical steroids were reduced to four times a day and atropine was stopped. Systemic steroids were, however kept on maintaining dose.

At two months visit, the best corrected visual acuity was 6/6 and disc edema had resolved with a good foveal reflex. The intraocular pressure was 18mmHg.

The patient complained of weight gain due to systemic steroid.

DISCUSSION

The condition was first recognized by Hippocrates and described and named by Mackenzie in the mid-1800s.[4]Fuch's provided the first histopathologic details in 1905[2].

Fig. 3: Colour fundus photograph and Fundus fluoroceine angiography showing disc edemaand abnormal foveal reflex.

It is a rare condition with no gender or racial correlation. It can occur in any age group following penetrating trauma or surgical intervention. Cases have been reported after cataract[3] and vitreoretinal surgeries[4] and even after ocular laser.[5]

The etiology of this is poorly understood with immunological reaction mediated by T cells against photoreceptor and uveal tissue antigen being the most important factor. While the particular antigen is yet to be determined, putative retinal antigens include retinal soluble antigen (S-antigen), rhodopsin, interphotoreceptor retinoid-binding protein, and recoverin[6,7]. The retinal S - antigen has been the most extensively studied.

The first symptom of Sympathetic Ophthalmia is photophobia and the decrease of near vision followed by far vision. Signs such as mutton fat keratitic precipitates, anterior chamber reaction, disc edema with late leakage on fundus fluorescein angiography and exudative retinal detachment with dalenfuchs nodules are pathognomic.[8]It is important to rule out other causes of granulomatous inflammation before making a final diagnosis as the diagnosis is that of exclusion.

Sympathetic Ophthalmitis can be prevented by doing enucleation of sympathizing blind eye within 10 days of trauma, especially in those cases having exposed cillary body.

Treatment includes topical and systemic steroids. Antimetabolites are used in case of steroid intolerance. Systemic steroid should be continued for six months and then tapered off as Sympathetic Ophthalmitis has a relapsing and remitting course.

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