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Sympathetic Ophthalmia: A Case Report

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ABSTRACT

Sympathetic ophthalmitis(SO) is a rare,bilateral granulomatous uveitis of unknown etiology,90% occurring within one year after perforating eye injury or ocular surgical procedure. Early diagnosis and appropriate management helps in controlling the inflammation and to retain useful vision. This case is presented for its rarity and our case demonstrates that a delayed onset of SO may also occur after initial trauma.

KEYWORDS

Sympathetic ophthalmia, Penetrating injury, Granulomatous uveitis

CASE REPORT

42 yrs old male presented with loss of vision right eye following a road traffic accident. On examination Best corrected visual acuity was no perception of light in right eye and 6/6 in left eye.The right eye showed scleral tear extending from upper nasal quadrant to limbus at 5 o'clock position and lower lid laceration. Primary sclerocorneal suturing was done and treated with local and systemic antibiotics and steroids. Two years later he presented with pain and defective vision left eye. On examination, left eye best corrected visual acuity was hand movements. The conjunctiva was hyperemic, cornea hazy, anterior chamber showed large granulomatous keratic precipitates(Fig 1) and posterior segment showed exudative retinal detachment.

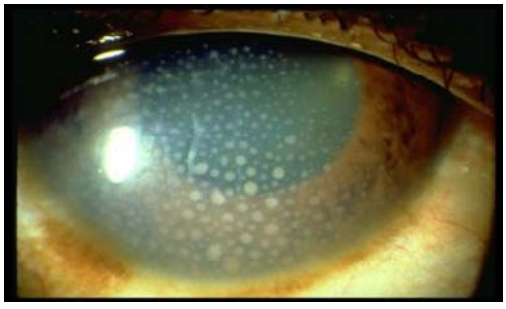

Fig 1: Left eye showing Granulomatous uveitis with mutton fat KPs

All lab investigations were within normal limits. A clinical diagnosis of Sympathetic ophthalmia was made and right eye enucleation was done(Fig 2) and he was started on systemic and local steroids and immunosuppressants.

Fig 2: Right eye with prosthesis

At 4 wks follow up patient vision was improved to 6/24 with anterior chamber getting quiet. 3 yrs later he came for routine check up, left eye Best corrected visual acuity was 6/9 with quiet AC and fundus showed sunset glow fundus with Dalen fuchs nodules(Fig 3).

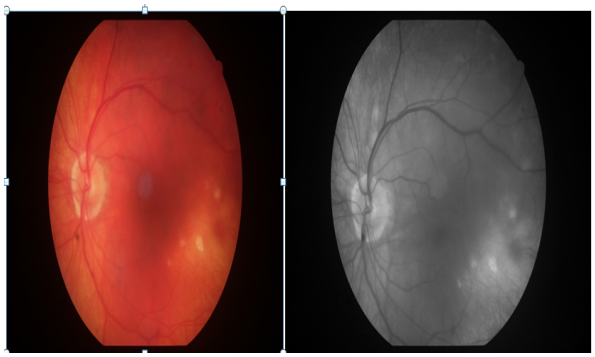

Fig 3: Left eye showing sunset glow fundus with Dalen Fuchs nodules

DISCUSSION

Sympathetic ophthalmia is a rare, bilateral, diffuse granulomatous form of uveitis that occurs after either surgical or accidental trauma to the uvea of one eye, usually 3 months after injury. The incidence of SO ranges from 0.2 to 0.5% after penetrating ocular injuries and 0.01% after intraocular surgery.[1] The sympathizing eye demonstrates signs of the ocular inflammation without any apparent reason. The time from ocular injury to onset of SO varies greatly, with 80% of the cases occurring within 3 months after injury to the exciting eye and 90% within 1 year.

It is a cell-mediated immune response directed against ocular self-antigens found on photoreceptors, the retinal pigment epithelium (RPE) and/or uveal melanocytes.[2]The classic most common precipitating event was accidental penetrating ocular trauma but better emergency care and microsurgical techniques following penetrating trauma helps to reduce its incidence. Non perforating ocular procedures like irradiation and laser therapies have also associated with SO.[3]The clinical onset of sympathetic ophthalmia is by the development of mild inflammation in the sympathizing eye and the worsening of inflammation in the exciting eye. Frequent prodromal symptoms are pain, photophobia, lacrimation, and blurring of vision. In sympathetic ophthalmia ocular examination displays symptoms characteristic of bilateral granulomatous panuveitis,with 'mutton fat' keratic precipitates, and anterior chamber reaction. Posterior segment examination typically reveals moderate to severe vitritis, optic nerve head edema, choroidal infiltration and midequatorial yellowish-white choroidal lesions that correspond histopathologically to the Dalen–Fuchs nodules .These are not pathognomonic for sympathetic ophthalmia, as its also seen in other granulomatous inflammatory eye diseases but they might be suggestive of a more severe stage of the disease.

Depending up on the severity, clinical manifestations of sympathetic ophthalmia ranges from mild or transient uveitis to ocular complications like extensive anterior and posterior synechiae, iris thickening due to lymphocytic infiltration, pupillary membrane formation, rubeosis, glaucoma, cataract, optic atrophy, peripapillary choroidal atrophy, exudative retinal detachment, chorioretinal scarring, choroidal neovascularization and possibly phtisis.

The diagnosis of sympathetic ophthalmia is based on history and clinical examination. However in 20% cases diagnosis is based on histologic findings.[4] Histologicaly, there is a diffuse, non necrotizing granulomatous inflammation involving the uvea, made up of lymphocyte infiltration intermixed with epithelioid cells In atypical cases other causes of granulomatous uveitis like tuberculosis,syphilis, sarcoidosis and Vogt-Koyanagi-Harada disease should be considered and ruled out with appropriate investigations.

The conventional treatment of sympathetic ophthalmia is the prevention of its occurrence by enucleation of the injured eye within 2 weeks of the trauma, before its sensitization.[5] Once the diagnosis of sympathetic ophthalmia has been established, large doses of topical and systemic corticosteroids should be given, to improve visual outcome and prevent recurrences. Enucleation within 2 weeks of the appearance of sympathetic ophthalmia symptoms may improve the visual prognosis and lead to fewer and milder relapses. [6]Other immunosuppressive therapies may be considered isolated or in association with steroids.

This case is presented for its rarity and our case demonstrates that a delayed onset of SO may also can occur after initial trauma.

REFERENCES

1.Update on Sympathetic Ophthalmia J Fernando Arevalo, Reinaldo A Garcia,Hassan A Al-Dhibi, Juan G Sanchez, Luis Suarez- Tata Middle East Afr. J. Ophthalmol 2012 Jan – Mar, 19(1):13-21

2. Gregory LS, Louis BC, Jayne SW (2012) Sympathetic ophthalmia. In: Basic and Clinical Science Course. Section 9, Chapter 6 178-183.

3. Arevalo JF, Garcia RA, Al-Dhibi HA, Sanchez JG, Suarez -Tata L, et al. (2012) Update on sympathetic ophthalmia. Middle East Afr J Ophthalmol 19(1): 13-21.

4. Damico FX, Kiss S, Young LH (2005) Sympathetic ophthalmia, seminars in ophthalmology 20(3): 191-197.

5.Myron Yanoff, Jay S Duker Ophthalmology 4th ed pg 767-769

6.Albert Jakobiec Principles and Practices of Ophthalmology 3rd ed Vol 1 pg1221-1230