

Sympathetic Ophthalmitis: Rare Possibility after an Uneventful Cataract Surgery

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Received: 6 December 2013 Accepted: 4 January 2014 Published: 15 January 2014

Abstract

Sympathetic ophthalmitis is a rare, diffuse, bilateral, granulomatous, non-necrotising panuveitis that develops after surgical or accidental trauma to one eye (exciting) followed by a latent period and the appearance of uveitis in the uninjured fellow eye (sympathizing). This case highlights the possible rare occurrence of sympathetic ophthalmitis after an uneventful cataract surgery.

Index terms— sympathetic ophthalmitis, rare, uneventful, cataract surgery.

1 Introduction

Our case report describes a rare presentation of a 45 yrs female developing sympathetic ophthalmitis after an uneventful cataract surgery. Sympathetic ophthalmitis is a bilateral, non-necrotising, granulomatous panuveitis developing after accidental or surgical trauma. William Mackenzie gave the clinical description and coined the term "sympathetic-cophthalmitis". Ernst Fuchs in his publication in 1905 described - "Dalen Fuchs nodules".

2 Case Report

Visual acuity at presentation was HM and No PL and IOP was 13mm Hg and 70 mm Hg in the RE and LE respectively. Anterior segment examination of RE revealed granulomatous keratic precipitates on the corneal endothelium, Koeppe's nodules and neovascularization of iris. PCIOL was present. Anterior segment examination of LE showed corneal edema, shallow anterior chamber with 360 degrees posterior synechiae leading Author: Consultant Ophthalmology, Arvind Eye Hospital; Madurai. e-mail: dr.nimmirani@ymail.com B-Scan of both eyes showed exudative retinal detachment with choroidal thickening. Laboratory investigations including Mantoux test, serum ACE level, VDRL, antinuclear antibody tests, TLC, DLC, SGOT, SGPT were normal. CT scan of thorax was within normal limit. Fluorescein angiography of RE showed multiple hyperfluorescent leakage sites in the RPE during venous phase which persisted during late frames of study and pooling of dye in the areas of exudative retinal detachment.

Based on history, clinical features, B-scan and FFA findings diagnosis of sympathetic ophthalmitis was made. She was started on tab. methotrexate 20mg/ week, tab prednisolone (in tapering dose starting from 60mg/ day) with calcium and folate supplementation. Posterior sub-tenon's injections of triamcinolone acetonide (0.5cc) was given both eyes. Steroid antibiotic eye drop was advised for both eyes and anti-glaucoma eye drop was advised for left eye.

In subsequent follow-up, patient improved symptomatically with relief of pain and gradual resolution of anterior chamber reaction and vitritis in RE. LE did not show any evidence of improvement and developed resistant secondary glaucoma with persistently high IOP (more than 50 mm Hg) and became an absolute eye with nil visual potential.

On her last visit, after 10 months of above mentioned therapeutic regimen patient had visual acuity of HM in RE and LE showed no improvement. B-scan RE showed persistent vitritis with resolved retinal detachment. OCT RE showed epiretinal membrane with foveal atrophy.

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4 Discussion

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to seclisopupillae and iris bombe with complicated Abstract-Sympatheticophthalmitis is a rare, diffuse, bilateral, granulomatous, non-necrotisingpanuveitis that develops after surgical or accidental trauma to one eye (exciting) followed by a latent period and the appearance of uveitis in the uninjured fellow eye (sympathizing). This case highlights the possiblerrare occurrence of sympathetic ophthalmitis after an uneventful cataract surgery. cataract. Fundus examination of RE showed a normal disc and inferior exudative retinal detachment. Few dalenfuchs nodules were seen. LE funduscouldnot be visualized due to complicated cataract.

A 45years female, presented to us with the complaint of gradually progressive gross diminution of vision in both eyes for last two months. She had undergone cataract surgery in her right eye in a camp three months back elsewhere. She had episodes of intermittent pain in both eyes in last 2 months with episodes of headache and tinnitus for the past one month. There was no relevant past history of trauma, recurrent ocular inflammation, joint pain or backache, tuberculosis, oral and genital ulcers, skin rash, episodes of diarrhea or any other symptom suggestive of collagen vascular disorders. No written record of her cataract surgery was available but according to the patient it was uneventful with good visual recovery in the immediate post operative period. Incidence as reported in recent studies is 0.2% to 0.5% following injury and 0.01% following intraocular surgery. [1,2] Classically accidental trauma was the leading cause but in the recent times surgery especially the vitreoretinal surgery seems to have surpassed it as the major inciting cause. Even though non-surgical trau -ma is considered the most common inciting cause for sympathetic ophthalmitis, there are reports of it developing after vitreoretinal surgeries, [3] cataract surg -ery, [4]Yag-cyclodestruction, pars planaviterctomy, evis -ceration, Iridectomy, retinal detachment repair. [5,6] Cataract surgery that too uneventful has been reported very rarely as a precipitating event. In our case there was no history of trauma. Our patient had undergone only one intraocular surgery- cataract extraction with lens implantation with good visual gain in the immediate post-operative period. This suggests that this cataract surgery was the inciting event in our patient.

Latent period for the development of SO is variable with 1 month in 17%cases, 3 months in 50%cases and 1year in 90%of cases. [7]In our case, after a latent period of one month she started developing ocular symptoms.

Manifestations are usually asymmetric and have a wide spectrum starting with mild difficulty in near vision ,photophobia ,mild to severe granulomatous anterior uveitis with mutton fat keraticprecipitates, [8]iris thickening and elevated intraocular pressure (trabeculitis)or hypotony(ciliary shutdown).Our patient presented with defective vision in both the eyes. On examination features of granulomatous anterior uveitis including granulomatous keratic precipitates and koe -ppes nodules were found.IOP was also high.

Posterior segment examination often shows moderate to severe vitritis. Characteristic yellow-white mid-peripheral choroidal lesions-DALEN FUCHS nodules have been reported in addition to exudative retinal detachment and optic nerve swelling. [8,3] Complications which worsen the prognosis are secondary glaucoma, complicated cataract and chronic maculapathy leading to sub-retinal fibrosis and foveal atrophy. [9]Our patient had evident features of vitritis ,dalenfuchs nodules and exudative retinal detachment in both the eyes. In subsequent visits, our patient developed resistant secondary glaucoma and comp -licated cataract in the LE and foveal atrophy in the RE.

Extraocular manifestations include hearingdisturbance, alopecia, vitiligo and meningeal irritation. [4] Our patient also gave a vivid history of episodes of headache and tinnitus in the past one month.

Diagnosis depends mainly on history and clinical findings. Diagnostic modalities like B-scan, FFA , OCT and others only help us to rule out other diseases with similar clinical feature[2] B-scan and FFA in our patient revealed vitritis and exudative retinal detachment, supporting the diagnosis. OCT in our patient in the RE showed foveal atrophy explaining the persistent low vision in the RE.

Mainstay of treatment is immunomodulation using corticosteroid and other steroid-sparing immuneomodu-lators like cyclosporine, chlorambucil, azathioprine, cyclosporine and methotrexate. [10] Our patient was also treated with immunomodulators like prednisolone and methotrexate.

"Secondaryenucleation" -enucleation of the exciting eye after the development of sympathetic ophthalmitis is highly controversial. In our patient the exciting eye was the only seeing eye, so its preservation was crucial.

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