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Sympathetic Ophthalmitis:Rare Possibility after an Uneventful Cataract Surgery

By Dr. Nimmi Rani
Arvind Eye Hospital, India

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Sympathetic Ophthalmitis:Rare Possibility after an Uneventful Cataract Surgery

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I. Introduction

Our case report describes a rare presentation of a 45 yrs female developing sympathetic ophth - almitis 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- coph - thalmitis".Ernst Fuchs in his publication in 1905 des - cribed -"Dalen Fuchs nodules".

II. Case Report

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 unde - rgone cataract surgery in her right eye in a camp three months back elsewhere. She had episodes of interm - ittent 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.

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 rev - ealed granulomatouskeratic precipitates on the corneal endothelium, koeppes nodules and neovascularization of iris. PCIOL was present. Anterior segment exam - ination of LE showed corneal edema, shallow anterior chamber with 360degrees posterior synechiae leading to seclusiopupillae and iris bombe with complicated 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.

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 detac - hment.

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-tenons injections of triamcinolone aceto - nide(0.5cc)was given both eyes. Steroid antibiotic eye drop was advised for both eyes and antiglauc -omae - yedrop was advised for left eye.

In subsequent follow-up, patient improved symptomatically with relief of pain and gradual resol - ution of anterior chamber reaction and vitritis in RE. LE did not show any evidence of improvement and deve - loped resistant secondary glaucoma with persistently high IOP (more than50 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. Bscan RE showed persistent vitritis with resolved retinal detachment. OCT RE showedepiretinal membrane with foveal atrophy.

III. Discussion

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 lea - ding cause but in the recent times surgery especially the vitreoretinal surgery seems to have surprassed 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 deve - loping after vitreoretinal surgeries, [3] cataract surg -ery, [4]Yag-cyclodestruction, pars planaviterctomy, evis -

Author: Consultant Ophthalmology, Arvind Eye Hospital; Madurai.
e-mail: dr.nimmirani@ymail.com

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 ant - erior uveitis with mutton fat keraticprecipitates, [8]iris thickening and elevated intraocular pressure (trab - eculitis)or hypotony(ciliary shutdown).Our patient prese - nted with defective vision in both the eyes. On exam - ination features of granulomatous anterior uveitis inclu - ding 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 nod - ules have been reported in addition to exudative retinal detachment and optic nerve swelling.[8,3] Compli - cations which worsen the prognosis are secondary glaucoma, complicated cataract and chronic macula - pathy 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 resis - tant secondary glaucoma and comp -licated cataract in the LE and foveal atrophy in the RE.

Extraocular manifestations include hearing - disturbance, 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 detac - hment, 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 immune - omodulators like cyclosporine, chlorambucil, azath - ioprine, cyclosporine and methotrexate.[10] Our patient was also treated with immunomodulators like pred - nisolone 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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