INTERMEDIATE UVEITIS PARS PLANITIS

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Introduction

Uveitis, an inflammation of the uveal tract of the eye, anatomically may be classified as (1) anterior uveitis predominantly involving the iris and the anterior part of the ciliary body (pars plicata) (2) intermediate uveitis involving posterior part of the ciliary body (pars plana) and the extreme periphery of the retina (3) posterior uveitis involving choroid and retina posterior to the vitreous base. Intermediate uveitis consists of two syndromes (1) pars planitis and (2) chronic cyclitis. Both of these are characterised by vitritis and absent or minimal anterior uveitis. The only feature differentiating the two is absence of clinically detectable deposition of exudate over pars plana (snow-banks) in cases of chronic cyclitis. The clinical pattern of these syndromes have evolved under various names such as "cyclitis" by Fuchs in 1908 [1], "peripheral uveitis" by Schepens in 1958 [2], "pars planitis" by Welch and Wehlan in 1960 [3] and finally "Intermediate uveitis" by International Uveitis Study Group in 1987 [4].

Case Report

A 30 year old serving soldier presented to the ophthalmic OPD with complaints of sudden, painless diminution of vision in the right eye (RE) of two weeks duration. It was not associated with any watering, redness or photophobia. He gave no history of trauma or any other chronic illness. General examination revealed normal vital parameters with no evidence of any skin lesions, joint abnormalities, lymphadenopathy or hepatosplenomegaly. On ocular examination, right eye had visual acuity (VA) of 6/24 with no improvement with glass or pinhole, a quiet eye, normal pupillary reaction and a normal looking lens. He complained of wavy lines in all 4 quadrants around fixation point in the amsler-grid. Direct ophthalmoscopy (DO) showed hazy fundus view, indistinct disc margins due to peripapillary edema, an obliterated cup of the optic disc and suspected cystoid macular edema (CME) with peri-macular exudate. Slit-lamp examination (SLE) showed clear anterior chamber with no aqueous flare or cells, no evidence of posterior synechiae, a clear lens, numerous cells (20-25/3 mm X 1 mm section) and fibrous strands in the anterior vitreous. With a provisional diagnosis of intermediate uveitis an indirect ophthalmoscopy was done which confirmed DO findings and also revealed a patch of healed choroiditis 3 disc-diameters away from macula in the 9 O'clock meridian. In addition there were areas of

vascular sheathing and haemorrhages in the retinal periphery. Another attempt was made to look for exudate in the periphery with a Goldmann 3 mirror contact lens and a few scattered exudates could be seen in the inferior retinal periphery. Left eye had a VA 6/6, a quiet anterior segment, a clear vitreous and a normal fundus. Both eyes had normal intraocular pressure.

Taking in to account the above findings the patient was investigated. Routine hemogram, urine examination, blood sugar, serum calcium and X-ray chest were all within normal limits. Blood VDRL and rheumatoid factor were negative. This confirmed, by exclusion, the diagnosis of intermediate uveitis (Pars Planitis).

The patient was given 40 mg of methyl-prednisolone sub-tenon in RE and was also started on 60 mg of oral prednisolone per day. On fifth day his VA was 6/12 and wavy lines on amsler-grid were restricted to two inferior quadrants. SLE also showed reduction in vitreous cells (10-12). At present, one month after the onset, the patient is being given 10 mg/day oral prednisolone and now has a VA of 6/9 with amsler-grid distortions restricted to infero-nasal quadrant. The vitreous reaction, peripapillary edema and perimacular edema have reduced significantly but perimacular and peripheral exudate persist.

Discussion

Intermediate uveitis has been better defined over the past 25 years. It is an idiopathic chronic, insidious, intraocular inflammation of young adults [5]. Almost 80% patients develop bilateral disease [6]. The major symptoms are floaters and hazy vision due to vitreous cells or CME. There is usually no pain, redness or photophobia. Severity of involvement is frequently asymmetrical. While the external eye is quiet there may be small keratic precipitates and no more than 1+ flare and cells. Most of the signs are in the vitreous cavity in form of cells, debris and "snow-ball" opacities. The retina may have patchy peripheral periphlebitis. There may also be peripapillary retinal edema. Exudates over the inferior pars plana (snow-banks) are the hallmark of the disease.

Smith, Godfrey and Kimura in their study described three patterns of disease (1) a self limiting course with gradual improvement (10%) (2) a prolonged course without exacerbations (59%) (3) a chronic smouldering course with one or more exacerbations (31%) [6]. Despite this visual prognosis is relatively good. Vi-

sion-threatening complications are CME, secondary cataract, tractional retinal detachment and cyclitic membranes. It has been observed that presence and extent of "snow-banks" is associated with more advanced or more severe vitreous inflammatory disease and the presence of CME [7]. Intermediate uveitis falls into the category of "vitritis" for purpose of differential diagnosis and therefore has to be differentiated from sarcoidosis, amyloidosis, active retinitis and recent trauma.

A four-step approach is used for management [8]. Patients in whom disease is unilateral monthly sub-tenon periocular injections of a long-acting steroid e.g. methyl-prednisolone 40 mg are given. In patients with bilateral disease oral steroids (Prednisolone 60 mg/day for 2 weeks) are given in tapering doses till minimum effective maintenance dose is achieved. Patients who do not respond to steroids are treated with local cryotherapy to the snow banks. If cryotherapy fails, then a pars plana vitrectomy may have to be done. If the inflammation still persists then systemic antimetabolites e.g. cyclophosphamide and chlorambucil may be the final resort.

In this case absence of frank snow-banking makes the prognosis better. The patient already shows signs of improvement. Though the affliction is only unilateral oral steroids were instituted in view of the pres-

ence of patches of perivasculitis in the retinal periphery of RE. The presence of sub-clinical state of the same disease in left eye can't be ruled out.

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