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Editorial

Sudden blindness in Nepalese children

Malla OK
Department of Ophthalmology, Kathmandu Medical College, Sinamangal

Seasonal Endophthalmitis (SE) is a non-infective suppurative inflammation of the inner eye, the inner eye consisting of the ocular cavities including the retina and vitreous. Toxic reaction to the chemicals and toxins have been blamed responsible for many such endophthmitis. SE has, till today, been reported from Nepal only.

The disease typically is unilateral, begins very acutely with red eye, little pain, photophobia and leucocoria due to massive exudation in the vitreous cavity. There is also a fibrinoid reaction in the anterior chamber and often there is a hypopyon. This is followed by hypotony and very sudden drop in vision. Examination of the fundus is obscured by leucocoria. Anterior chamber ultimately becomes flat and eye becomes pthisical. Therapy till date has been unsuccessful and experience with early vitrectomy has shown some success in restoring useful vision and preserving globe[5].

In December 1978 a series of 13 cases as epidemic of blinding eye disease "Endophthalmitis probably caused by Tossock Moth" was reported for the first time from Pokhara. This had almost taken the form of an epidemic. In late monsoon season Aug. to Sept. of 1977, a sudden increase in severe rapid onset uveitis was noticed coinciding with the increase in the population of Tussock moth, far heavier than in other years and in several cases the patients spontaneously suspected these moths. In this series of 13 cases 7 were female and 6 were male with ages ranging from 3 months to 39 years. Of this 9 were below 10 years of age. In all of them only one eye was involved and all eyes went blind in a week or so in spite of the earliest and intensive treatment with topical and subtenons steroids. Two patients gave definite history of contact with moths whilst there was suspicion in two others. The paper highlighted the connection between the moth and severe uveitis, there being a strong epidemiological evidence for such a relationship. Again all cases occurred in a six weeks period when these moths were in abundance[1].

Upadhayay et al[2, 3] reported similar condition occurring in two cycles after first being recognized soon after monsoon season and named the disease as Seasonal Hyper Acute Panuveitis (SHAPU) instead of endophthalmitis as reported. These workers also noted several children exposed to the moths, but they were unable to define if antigens from moth induced uveitis. Their histological study of the enucleated eye revealed severe inflammatory response with lymphocytes and plasma cells.

Dr.Byanju RN et al[4] reported similar cases affecting mostly children during the similar period of the year in Pokhara. First it was noted during 1999, Aug-Sept, no cases were seen during 2000 and again cases were seen during Aug-Sept 2001. The moth population was high during those period and all their patients gave history of contact with moths in the evening around tube lights. Hence, they also felt that the disease has association with moths in view of the fact that the disease coincides with an increase in moth population and that all patients gave history of contact with moths. Also the intense intraocular inflammation leading rapidly to hypotony and pthisis bulbi made the workers feel that the disease is more likely endophthalmitis rather than panuveitis.

Early reporting and prompt treatment with vitrectomy within hours of the onset of the disease has saved some useful vision and has preserved the globe, but by and large most of the affected eyes have gone blind. Vitrectomy helps in removing toxins and enzymes present in the exudation mass in the vitreous. However, vitrectomy is an expensive and technically difficult procedure. Besides this service is available in only one centre outside of Kathmandu at Bhairahwa. As Pokhara is the site of most such episodes, there is justification of having one there.

Till further investigations and a definite therapy is identified the management of SE means only prevention. Keeping away from the white moths (Tussock Moths) appears to be the only alternative left to us. So it is advisable that the parents and guardians be aware of this fact and take necessary precautions to save their children from unnecessarily going blind.

References

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