

# ANTERIOR LEPROTIC RETINITIS OF TRANTAS: A CASE REPORT

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## SUMMARY

A case of rare retinal lesion occurring in a young girl suffering from lepromatous leprosy is described. Fundus lesions in leprosy are extremely rare but do occur in some cases without causing any threat to vision. Their response to antileprotic treatment is not clearly known.

## INTRODUCTION

Ocular involvement occurs in lepromatous as well as in tuberculoid types of leprosy. It is the anterior segment of the eye which is commonly affected by the granulomatous infiltration induced by the lepra bacilli, which can be demonstrated in biopsy material from the lepromatous variety.

Infiltrative lesions of leprosy involving the posterior segment of the eye are said to be extremely rare. Some authorities even deny their existence altogether.

The author has observed such a lesion in one eye of a young girl being treated for lepromatous leprosy. In view of the rarity and controversy

over its occurrence, the fundus changes of this unusual case are reported below.

## CASE REPORT

R.N., an 18-year-old Malay female was referred to the eye clinic in November 1983. She complained of bilateral redness, irritation and lacrimation of her eyes of one week duration.

She had been thoroughly investigated for fever and cough, and was found to have lepromatous leprosy confirmed by positive skin smears and positive lymph node biopsy. Ten days prior to the eye referral, she had been started on lamprone 100mg EOD, Dapsone 75mg BD and Thalidomide 100mg BD.

Ocular examination showed right visual acuity 6/9 N6 and left visual acuity of 6/12 N6. Both eyes showed moderate follicular conjunctivitis and punctate epithelial keratitis. There was no reaction in the anterior chamber in either eye. Fundoscopy of the right eye did not reveal any significant abnormality. The left fundus however showed a raised rounded yellowish lesion in the lower temporal periphery at about 4 o'clock meridian. It measured about 1/4 DD in diameter and was situated about one DD posterior to the ora serrata. The area near this retinal nodule showed irregular greyish white discolouration similar to the "white without pressure" change in the degenerated retina.

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There was no visible pigmentary disturbance. Vitreous in the vicinity of retinal lesion was slightly hazy. Intraocular pressures of both eyes were within the normal range. (Fig. 1).

Two weeks later she presented with slight pain photophobia and blurring of both eyes. Biomicroscopy showed fine keratic precipitates along with flare and cells in the aqueous of both eyes. No iris lesions were found in either eye. She was treated with topical Betnesol eye drops and mydriatics, to which she responded very quickly. She had another flare-up of bilateral anterior uveitis in May 1984 which again settled quickly with topical steroid therapy. There has been no skin reaction during these ocular recurrences. Her vision remains 6/6 N5 in each eye. The left retinal lesion has shown slight regression in size and the vitreous haze has

gradually disappeared since starting the patient on antileprotic therapy.

## DISCUSSION

Leprosy is still a poorly-understood disease. Ocular presentation may be the initial manifestation of leprosy especially in those areas where this disease is uncommon and therefore not suspected. The mode of transmission and its pathogenesis are not completely known because of the difficulties in reproducing the human disease in animal models and culturing the *Mycobacterium leprae*.

Eye involvement occurs in an average of 50% of cases of leprosy.<sup>1</sup> Middle-aged people and those with a long history of the disease have the most severe ocular changes.<sup>1</sup> In majority of the patients,

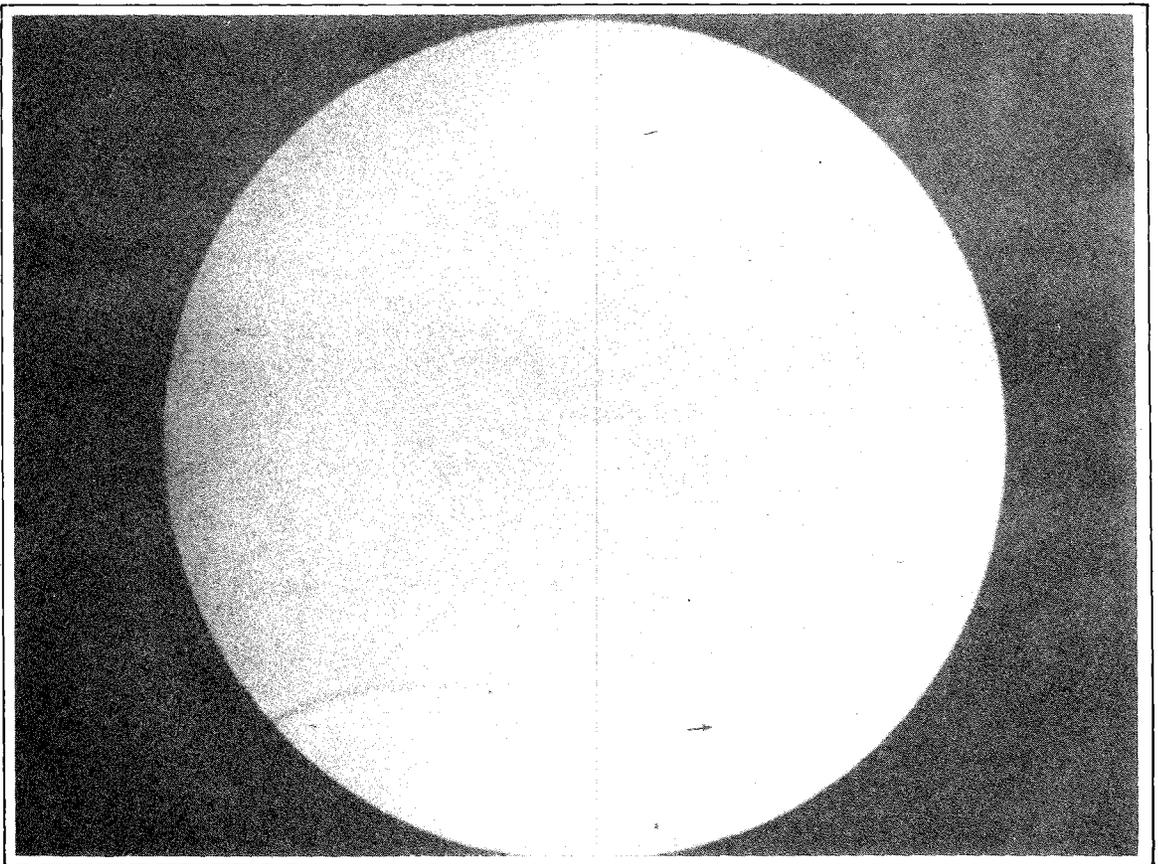


Fig. 1 Fundus picture showing the rounded raised retinal lesion (black arrow).

ocular disturbances are localised in the anterior segment of the eye.<sup>2</sup>

Lesions of the fundus are rarely seen in leprosy and, if at all they ever occur, are due to extension from the ciliary body lesion.<sup>1</sup> "Anterior leprotic retinitis of Trantas" is a rare retinal lesion of lepromatous leprosy.<sup>1</sup> It usually occurs secondary to an infection of the uveal tract and typically affects the retinal periphery by continuity in a chorioretinitis particularly in its lower temporal quadrant.<sup>2</sup> The reason for this predilection is obscure. It has been suggested that the ciliary body being most exposed below the lateral rectus insertion allows the lepra bacilli to flourish best in a temperature slightly below that of blood.<sup>2</sup> Larger chorioretinal lesions may occasionally be seen.<sup>2</sup> Small waxy or creamy-white nodules may also be observed lying superficially on the retina and projecting into the vitreous.<sup>1</sup>

Some observers have denied the occurrence of specific fundus lesions attributable to leprosy.<sup>3</sup> Weerekoon,<sup>3</sup> while searching for specific posterior segment lesion in leprosy, examined 444 patients in West Malaysia and considered leprosy as a possible cause only in 16 eyes with different types of fundus changes. In none of these cases a specific chororetinitis similar to the one described in this report was found.

However there are others who believe that specific fundus changes do occur in some patients of leprosy. Choyce<sup>2</sup> firmly believes that 4% of leprosy patients show a specific lesion in the retina in the form of "a heaped-up, highly refractile, hypo-pigmented area at the periphery of the fundus particularly the temporal periphery". The retinal abnormality noted in the case reported in this paper appears to be quite characteristic and specific as has already been described in the literature. It has been advised that all conditions capable of producing changes in the retina and choroid such as syphilis, tuberculosis and others, should be excluded before the diagnosis of leprotic retinitis is made.<sup>1</sup>

This case had been thoroughly investigated to detect any other disease before leprosy was discovered. Short duration of symptoms indicating recent onset of lepromatous activity in this patient is highly suggestive of a strong correlation between the retinal lesion and her systemic disease. Such a fundus lesion occurring during an early active phase of leprosy has not been observed before. Moreover this is perhaps the first time that an active posterior segment involvement has been seen in the absence of any evidence of anterior segment affliction. Subsequent development of bilateral acute iridocyclitis and its later recurrence in this patient further supports the leprotic nature of the total ocular pathology.

This particular case suggests that recognition of such fundus abnormality should alert the clinician to initiate further investigations of suspected leprosy just as a specific retinopathy does in diabetes and hypertension. As there is no common consensus yet regarding the occurrence of such a specific retinal lesion in leprosy, further studies are needed.

## ACKNOWLEDGEMENT

The author wishes to thank Professor Datuk Mohd Noor Marahakim for constant encouragement, Medical Illustration Unit for the photographs and Puan Husna Idris for typing the paper.

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