

Bitemporal Hemianopia-An indication of Ethambutol intoxicity.**Dr Dinesh Kumar¹, Navneet Kaur², Snimer Kaur³, Zoya Gurpreet Paul⁴**¹Assistant professor, Department of Medicine, SGRDIMSAR, Amritsar, Punjab, India²MBBS – Graduate, SGRDIMSAR, Amritsar, Punjab, India³MBBS – Intern, SGRDIMSAR, Amritsar, Punjab, India⁴MBBS – Second Professional year, SGRDIMSAR, Amritsar, Punjab, India

INTRODUCTION Tuberculosis is one of the ancient diseases known to man caused by *Mycobacterium tuberculosis*. It primarily presents as the pulmonary form but in severe cases it may disseminate to other areas of body like liver, brain, intestine etc. Tb meningitis is a characterised by significant complications of the CNS. It is accompanied by non specific and heterogeneous clinical symptoms. The treatment of tuberculosis involves a multi-drug therapy regimen comprising of Isoniazid, Rifampin, Pyrizinamide and Ethambutol as the primary first line drugs. Each of these drugs is associated with several side effects. We here present the side effect of ethambutol intoxication-

BITEMPORAL HEMIANOPIA, a peripheral visual field disorder which is unusual since ethambutol is usually associated with central field defects.

CASE DESCRIPTION A series of patients ranging from 25-50 years of age, presented to us with bitemporal visual loss of subacute onset duration. Patients were on treatment for tubercular meningitis for the past 4 months. On confrontation method for checking the visual fields, they were found to have bitemporal hemianopia. Perimetry was done for confirming the same and revealed similar results. MRI-Brain with contrast was done to rule out any pituitary gland pathology, which was absolutely normal. Considering the literature, a rare side effect of ethambutol causing bitemporal hemianopia was confirmed and patients were asked to withdraw ethambutol from the Anti-tubercular therapy. Patients were followed up for a period of 4 months and hemianopia started disappearing. Since ethambutol is related to central visual field defects and our patients presented with peripheral field defects, it makes this adverse effect an unusual one.

DISCUSSION According to the WHO-Tb statistics for India for 2018, the Tb-infected patients are estimated to be 2.69 million. It is estimated that about 40% of the Indian population is infected with Tb bacteria, the vast majority of whom have Latent Tuberculosis

rather than Tuberculosis Disease. Because of this increasing incidence, the use of First Line Anti-Tubercular drugs is increasing. Due to this reason, it is essential for us to know the side effects related to each of these drugs so that timely detection of these can be made and permanent damage to the patients can be prevented. It also encourages us to search for new and safer drugs having equal efficacy and lesser side effects than the current available drug regimen.

CONCLUSION The results of these studies suggest that a peripheral visual field defect like Bitemporal Hemianopia can be the presenting feature of Ethambutol intoxication which can be reversed on discontinuing the drug from the treatment of Tuberculosis.

KEYWORDS Tuberculosis, meningitis, bitemporal hemianopia, visual field, confrontation