

A Case Report on Abdominal Koch's Causing Ocular Manifestations(Ocular Vasculitis) .

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I. Introduction

Tuberculosis is caused by Mycobacterium tuberculosis, commonly affecting the lungs, although extrapulmonary manifestations are not uncommon . Ocular involvement secondary to hematogenous spread is common. It may present as anterior uveitis and panuveitis apart from posterior segment findings such as retinitis and choroidopathy .Retinal vasculitis is associated with vitritis, retinal hemorrhage, neovascularization, and neuroretinitis .Choroidal tubercles, choroidal tuberculoma, subretinal abscess and serpiginous like choroidopathy may be seen . Mantoux and Quantiferon gold test are supportive of diagnosis. Diagnostic criteria for ocular tuberculosis include at least one or more clinical sign along with positive PCR or demonstration of AFB under microscope or culture of ocular fluids .Prognosis is variable and depends on early diagnosis and treatment.

Tuberculosis (TB) is one of the most common systemic diseases in India. Intraocular TB is however, rare. Retinal vasculitis is a relatively rare manifestation of intraocular TB. We report a case of unilateral retinal vasculitis in a 40-year-old male with abdominal tuberculosis. The patient responded well to anti-TB treatment along with a short course of low dose oral steroids. Vision in her right eye however remained compromised due to residual maculopathy.

II. Case Report

A young male presented with chief complains of fever(low grade), malaise, decrease appetite, pain abdomen, constipation and blurring of vision since 1 month.

On Examination:-

On Examination :- His general condition was unsatisfactory his initial blood pressure in left arm supine position was 130/90 and pulse rate of 88/min. Pallor was present, Icterus, cyanosis, Edema, Lymphnode absent. Patient was conscious oriented to time, place, person CNS:-WNL

Cvs :-S1S2+, No added sound, no murmur was heard

R/S:- B/L AE+, normal vesicular breath sound,

P/A:- Soft, Non-tender, No-palpable organomegaly

His initial investigation revealed microcytic, hypochromic anemia with leucocytosis (Hb 7.2 method photometry, Wbc 14.2 method electrical impedance), LFT WNL. ESR 94 method modified westergen urine r/mm wnl. Mountoux 9mm

CECT ABD:-thickened nodular mesentery with multiple mesenteric lymphnodes.

Fundus examination:- vasculitis with neovascularisation

III. Disussion

The large variations in clinical presentation and the lack of uniformity in diagnostic criteria make the diagnosis of intraocular TB difficult. In most cases diagnosis requires corroborative evidence, such as a positive PPD and chest x-ray, or a positive therapeutic trial for TB with exclusion of other causes (presumed ocular TB). Direct evidence for the presence of the infectious agent in the eye by demonstration of acid-fast organisms under the microscope or the detection of bacterial genome by polymerase chain reaction (PCR) is required for confirmation (confirmed ocular TB).

There are several reports of retinal vasculitis due to TB. Gupta and co workers described thirteen patients of retinal vasculitis. In all patients PCR of intraocular fluid (aqueous and vitreous) was positive for Mycobacterium TB. Rosen and co workers described a series of twelve patients with intraocular TB; nine of them had florid ischemic retinal vasculitis.Hoh *et al.* reported a case of bilateral retinal periphlebitis which responded promptly to two months of antiTB treatment. Eale's disease is a form of retinal vasculitis predominantly affecting the peripheral retina of young and otherwise healthy adults between 15-40 years.

Biswas *et al.* demonstrated Mycobacterium TB by nested PCR supporting the association of Mycobacterium TB in Eale's disease.

The differential diagnosis in our case included collagen vascular disease, sarcoidosis and hematological disorder; however these were ruled out by investigations. Antitubercular therapy in a patient of suspected tubercular retinal vasculitis should be four drug regimens which include isoniazid 5 mg/kg/day, rifampicin 450 mg daily if body weight is less than 50 kg and 600 mg/day if body weight is more than 50 kg, ethambutol 15 mg/kg/day and pyrazinamide 20 mg/kg/day for first four months followed by rifampicin and isoniazid for 9-14 months.

Our case report of unilateral retinal vasculitis due to abdominal TB. Thorough systemic evaluation in patients with retinal vasculitis to detect TB and prompt treatment with antiTB therapy can preserve vision. Prompt diagnosis and treatment with antiTB therapy led to an improvement in our patient.

References

- [1]. Bouza E, Merino P, Muñoz P, Sanchez-Carrillo C, Yáñez J, Cortés C. Ocular tuberculosis. A prospective study in a general hospital. *Medicine (Baltimore)* 1997;76:53–61
- [2]. Shah SM, Howard RS, Sarkies NJ, Graham EM. Tuberculosis presenting as retinal vasculitis. *J R Soc Med.* 1988;81:232–3.
- [3]. Sanders MD, Graham EM. Retinal vasculitis. *Postgrad Med J.* 1998;64:488–96.
- [4]. Gupta A, Gupta V, Arora S, Dogra MR, Bambery P. PCR positive tubercular retinal vasculitis: Clinical characteristics and management. *Retina.* 2001;21:435–44.
- [5]. Rosen PH, Spalton DJ, Graham EM. Intraocular tuberculosis. *Eye (Lond)* 1990;4:486–92.
- [6]. Hoh HB, Kong VY, Jaais F. Tubercular retinal vasculitic. *Med J Malaysia.* 1998;53:288–9.
- [7]. Madhavan HN, Therese KL, Gunisha P, Jayanthi U, Biswas J. Polymerase chain reaction for detection of *Mycobacterium tuberculosis* in epiretinal membrane in Eale's disease. *Invest Ophthalmol Vis Sci.* 2000;41:822–5.