

A middle-aged man with choroidal granuloma

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Abstract

A 32-year-old male presented with signs of focal choroiditis which evaluation found to be tubercular in origin. However, microbiological and histopathological examinations of vitreous and chorioretinal biopsies were suspicious of fungal infection. With a strong clinical suspicion of choroidal granuloma of presumed tubercular origin, the patient was commenced on antitubercular therapy (9 months) and oral steroids. The lesions started regressing with the disappearance of subretinal fluid 2 weeks following the start of antitubercular therapy. Visual acuity improved to 20/30 with chorioretinal scarring at the granuloma site after 6 months of therapy. In our case, despite the diagnosis of suspicious fungi (false-positive, possibly contaminant) on vitreous biopsy, clinical pointers (nature of the lesion, prevalence of disease, therapeutic response) helped us to diagnose choroidal granuloma. Prompt recognition and appropriate treatment helps to avoid the devastating consequences of the disease.

Key words: Choroiditis; Granuloma; Tuberculoma

Case history

A 32-year-old male presented with diminished vision in the right eye for 15 days. Visual acuity was hand motions with normal anterior segment. Examination of the fundus revealed the presence of a very mild vitreous haze, and a confluent yellow-white subretinal lesion measuring 2-3 disc diameters in size with localized exudative retinal detachment involving the macula (**Figure 1**). With a provisional diagnosis of choroiditis, the patient was investigated for tuberculosis,

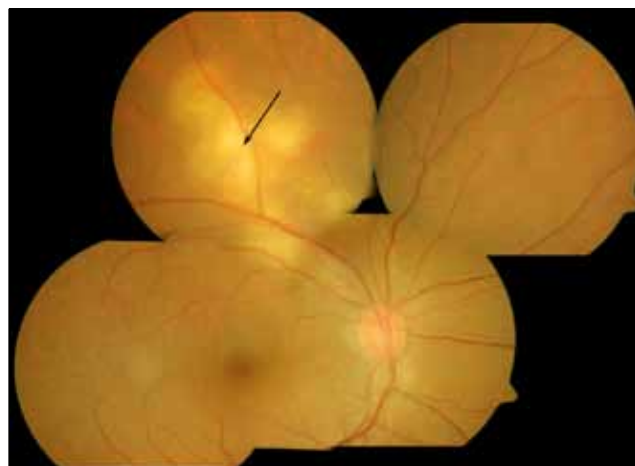


Figure 1. Composite fundus image showing confluent yellow-white subretinal lesions (arrow).

sarcoidosis, syphilis, and human immunodeficiency virus. Mantoux test was positive with 24 x 24 mm induration at 72 hours. Microbiological and histopathological examinations of vitreous and chorioretinal biopsy were suspicious of fungal infection. With a strong clinical suspicion of choroidal granuloma of presumed tubercular origin, the patient was commenced on antitubercular therapy (9 months) and oral steroids.

The lesions started regressing with the disappearance of subretinal fluid 2 weeks following the start of antitubercular therapy (**Figure 2**). Visual acuity improved to 20/30 with chorioretinal scarring at the granuloma site after 6 months of therapy.

Discussion

Tuberculosis can have a variety of ocular manifestations, and

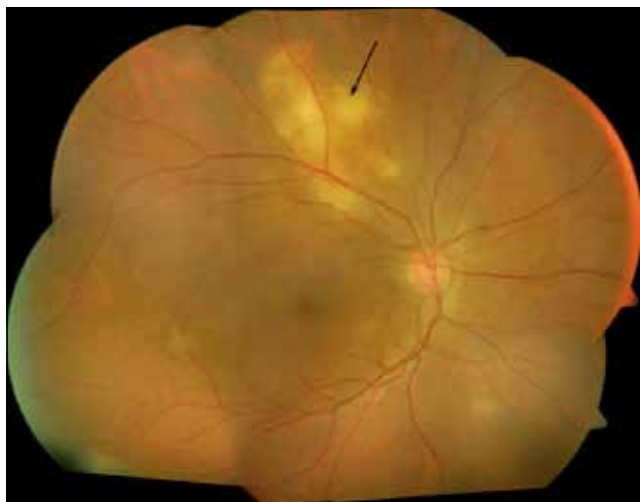


Figure 2. Composite fundus image showing scarring of the lesion (arrow) 2 weeks after starting the therapy.

consequently, may mimic a number of ocular inflammatory diseases. Posterior uveitis most often indicates choroidal involvement of tuberculosis.¹ Main types of choroidal involvement include choroiditis, subretinal abscess, tubercles, and tuberculomas. Yellowish subretinal abscesses can occur from liquefaction necrosis within a tubercular granuloma. Overlying vitritis and retinal hemorrhages are often found associated with the abscess.^{2,3} Diagnosing ocular tuberculosis can be difficult, and therefore requires many different pieces of evidence. Following exclusion of other possible causes of uveitis, a presumptive diagnosis can be established based on the combination of clinical signs consistent with known patterns of ocular tuberculosis and confirmatory ancillary testing or a positive response to a 4- to 6-month therapeutic trial of antituberculosis therapy.^{4,5} In our case, despite the diagnosis of suspicious fungi (false-positive, possibly contaminant) on vitreous biopsy, clinical pointers (nature of the lesion, prevalence of disease, therapeutic response) helped us to diagnose choroidal granuloma. Prompt recognition and appropriate treatment helps to avoid the devastating consequences of the disease.

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