SIMPLIFIED ABSTRACT SAMPLE WORK

Tuberculous Endophthalmitis with Phthisis Bulbi: A Diagnostic Delay Case Report

ARTICLE

DOI: 10.1002/ccr3.72589

Tuberculous Endophthalmitis with Phthisis Bulbi: A Diagnostic Delay Case Report

Yanchen Chen, Shengnan Li, Xin Chen, Ningpu Liu, Dongjing Liu

Background

Tuberculosis (TB), caused by Mycobacterium tuberculosis, remains a major global health burden, especially in endemic regions. While pulmonary TB is most common, extrapulmonary manifestations such as ocular tuberculosis present significant diagnostic challenges. Tuberculous endophthalmitis is a rare but severe intraocular infection that can lead to irreversible vision loss if not diagnosed and treated early.

specific background

In TB-endemic areas, endogenous endophthalmitis from bloodstream infection can cause vision loss, pain, and inflammation, and is often misdiagnosed, risking retinal damage and phthisis bulbi.

knowledge gap

Despite growing awareness, several challenges persist:

- **Low clinical suspicion in unexplained cases**
- **Lack of standardised diagnostic protocols**
- **Limited evidence on optimal treatment strategies**
- **Underreporting in endemic regions**

The role of adjunctive corticosteroids and surgical interventions remains insufficiently studied.

Here We Show

This study emphasises that tuberculous endophthalmitis should be prioritised in differential diagnosis in TB-endemic regions. Early systemic evaluation and timely intervention significantly improve clinical outcomes. Integrating ocular and systemic assessments is essential for accurate diagnosis.

Methodological

- **Comprehensive ocular examination (slit-lamp, fundus)**
- **Imaging (OCT, ultrasound)**
- **Microbiological testing (PCR, culture)**
- **Systemic TB evaluation (e.g., chest imaging)**

Key steps include confirming intraocular inflammation, excluding other causes, and identifying systemic TB.

Results & Interpretation

Early diagnosis combined with anti-tubercular therapy improves visual prognosis, while delays are associated with severe vision loss. Pars plana vitrectomy helps reduce infection and improve diagnostic accuracy. Combined medical and surgical management yields better outcomes, although evidence for corticosteroid use remains limited.

Implications

Clinicians in TB-endemic regions must maintain a high level of diagnostic awareness and act promptly. A multidisciplinary approach is crucial. Further research is needed to establish standardised treatment guidelines. Early recognition and management can prevent complications such as phthisis bulbi and improve patient outcomes.