

المؤتمر السنوي الدولي للجمعية المصرية
INTERNATIONAL CONGRESS OF THE

EGYPTIAN OPHTHALMOLOGICAL SOCIETY

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A case of Eales' disease

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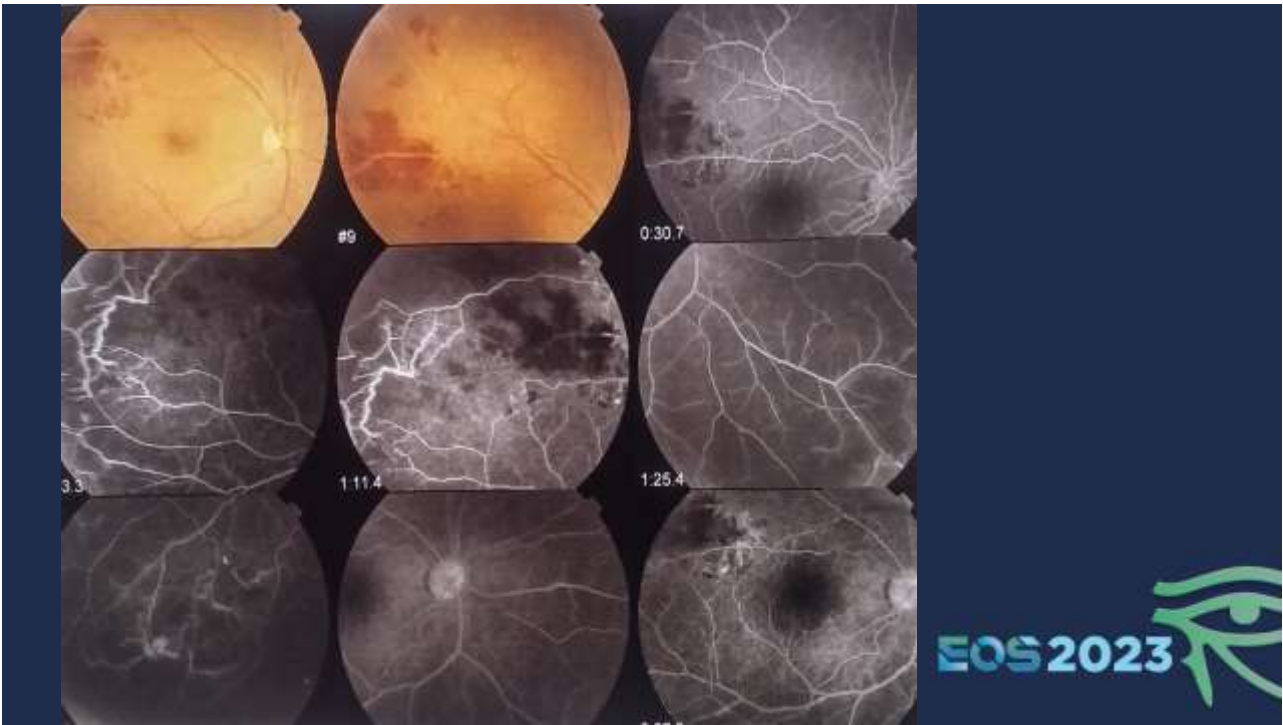


History and Examination

- Male patient early thirties.
- Left acute painless loss of vision.
- Left dense vitreous hemorrhage with peripheral occlusive retinal vasculitis.
- Right florid temporal retinal vasculitis and intra-retinal hemorrhage sparing the center.

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Labs

<u>Serology Report</u>		
Test	Result	Ref. Range
VDRL (Venereal Disease Research Laboratory)	Negative	Negative

<u>Laboratory Report</u>		
Test	Result	Ref. Range
Quanti feron T.B gold	Positive	Negative
<u>Comments :</u>		

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Treatment

- Anti tuberculosis antibiotics course started for 9 months.
- Prednisolone 30 mg /day.
- Left vitrectomy and laser ablation of ischemic areas.
- Right argon laser PRP to ischemic areas.



2 months later

Reported a papillo-macular rash that faded with anti-TB therapy leaving a pigmented discoloration.



Follow up

- On completion of anti-TB course (9m) the condition stabilized
- visual acuity of 20/30 bilaterally.
- Remained on pred 15 mg/d.
- Few months later -- started to develop few new hemorrhages in the right eye.
- ordered a new FFA.



Follow up

- Fill-in laser treatment.
- New anti-TB therapy course requested but delayed for 1 month (logistic problems) -- developed fresh KPs.
- 1 month later developed mild right vitreous hemorrhage while on anti-TB therapy and pred 15 mg.
- Received additional 3 month anti-TB course.
- Acute vitreous hemorrhage in right eye 5 months later.
- Pred increased to 20 mg and Azathioprine 100 mg added.

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3 years later

- Lost from follow up.
- Right vitrectomy with more laser treatment.

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Discussion

Introduction to Eales' disease:

- Affects healthy young adults, mostly male, often age 20–30 years.
- Most complain of one eye (floaters / decreased vision), the fellow eye will often show periphlebitis, vascular sheathing, or peripheral nonperfusion, detected using fluorescein angiography.
- Eventually, up to 90% of patients develop bilateral involvement.
- The *three hallmark signs* of the Eales' disease are retinal phlebitis, peripheral nonperfusion, and retinal neovascularization
- DD syphilis, TB, sarcoidosis, wagner's, ...
- Treatment: Corticosteroids up to 2mg/kg , ATT for 9 months, Anti-VEGF, photocoagulation is the mainstay of treatment, vitrectomy for vitreous hemorrhage.

Eales' disease; diagnosis and management , Eye (2010) 24, 472–482.

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Relation to TB

- Eales' disease has a high incidence in areas where TB is endemic.
- In several studies most patients with Eales' disease tested positive for TB.
- Skin test has high false positive incidence in endemic areas.
- In a recent study: QuantiFERON-TB Gold Plus test was positive in near 80% of cases
- PCR on vitreous biopsies found a significant Mycobacteria inoculum in at least 50% of cases.

Eales' disease: epidemiology, diagnostic and therapeutic concepts Murillo López et al. International Journal of Retina and Vitreous (2022) 8:3

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Controversies of ocular tuberculosis

- Terminology of TB: terminology of 'probable' and 'possible' OTB, which have resulted from the lack of an ideal specific test.
- Diagnosis of TB: disease pathogenesis?: Direct ocular invasion or Inflammatory reaction to systemic TB elsewhere.
Difficult to detect MB, PCR lack Comparison to culture, IGRA cannot differentiate between latent and manifest infections
- Treatment of TB: no clear guidelines, lack of response might mean absence of TB or antibiotics resistance, good response could be due to steroids.

Controversies in Ocular TB : Ang M, Chee S-P. Br J Ophthalmol 2017;101:6–9. doi:10.1136/bjophthalmol-2016-309531



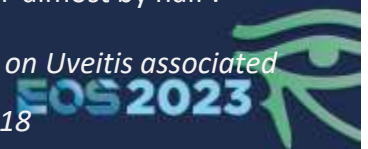
Presumed TB uveitis

Ocular tuberculosis remains presumptive

- Diagnosis of TB uveitis : 1-supportive clinical signs and 2-investigations, 3-in absence of other possible causes of uveitis.
- Patients with “*presumed TB uveitis*” should receive a 9m course of ATT.
- Rationale: For fear that immunosuppression might activate latent TB.

ATT in presumed TB uveitis reduces reactivation of inflammation almost by half .

S Lightman and P McCluskey et al. Effect of Antituberculous Therapy on Uveitis associated With Latent Tuberculosis. Am J Ophthalmol 2018;190:164–170. 2018



TB uveitis

- TB iridocyclitis with iris nodules.
- TB “Serpiginous-like” chorido-retinitis.
- Tuberculoma.
- TB multifocal chorido-retinitis.
- TB occlusive vasculitis.
- Can mimic any form of uveitis in endemic areas.

Classification Criteria for Tubercular Uveitis THE STANDARDIZATION OF UVEITIS NOMENCLATURE (SUN) WORKING GROUP 1AJO.VOL. 228 page 142

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Granulomatous TB iridocyclitis





CB
Tuberculoma

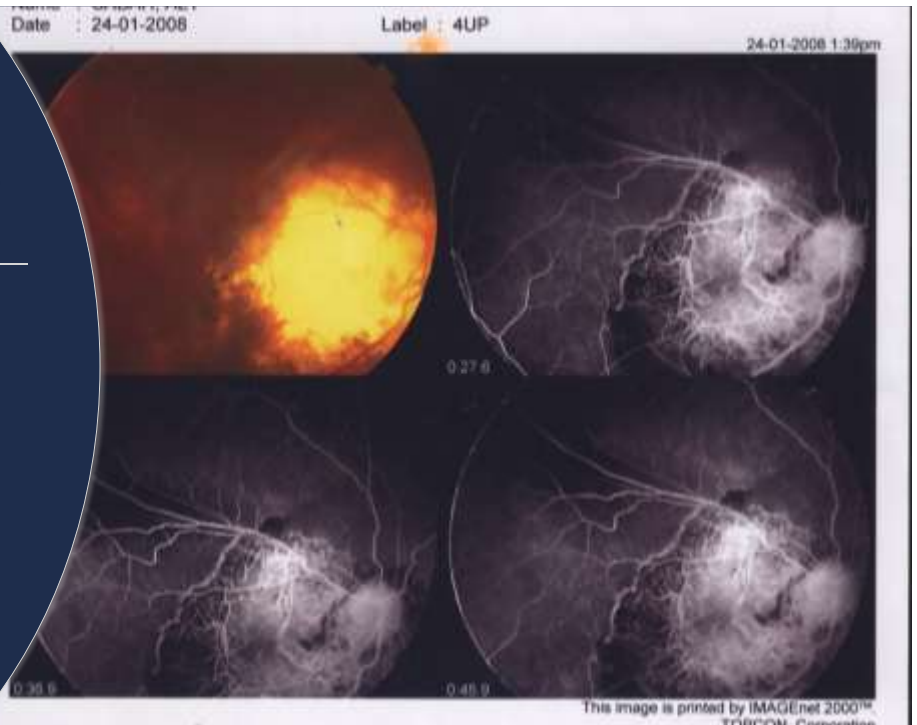


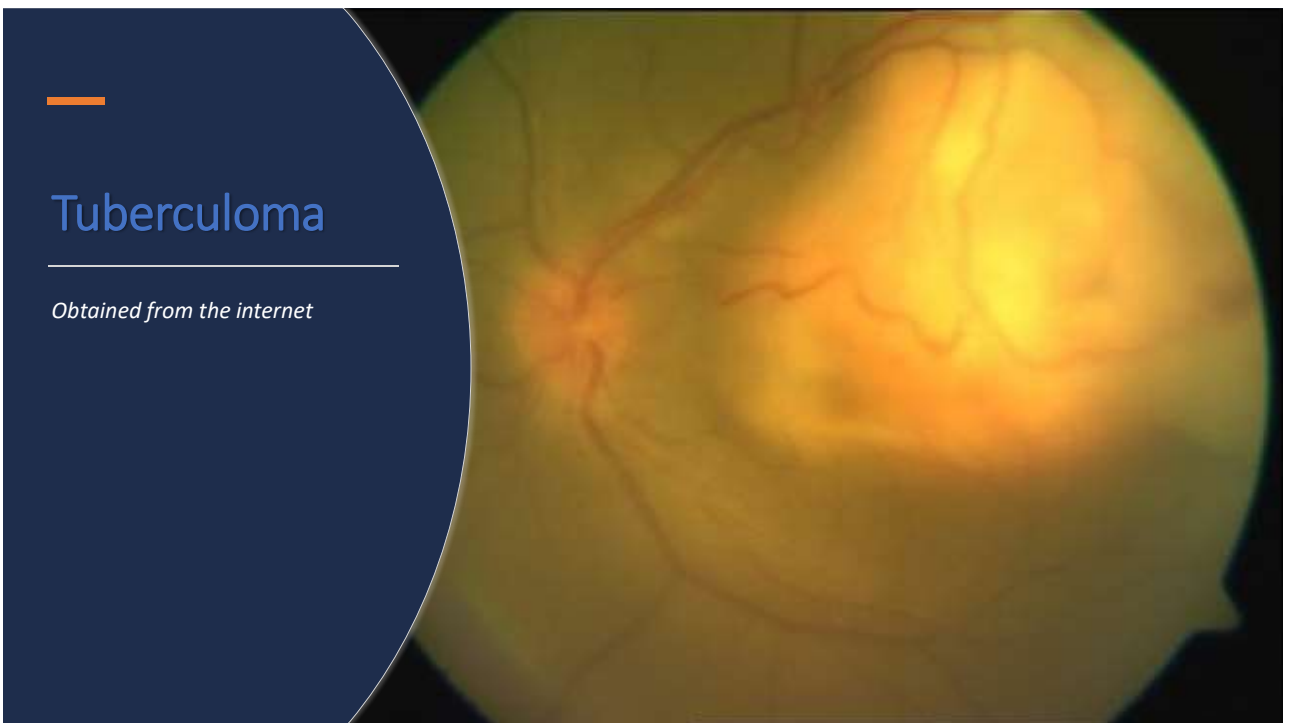
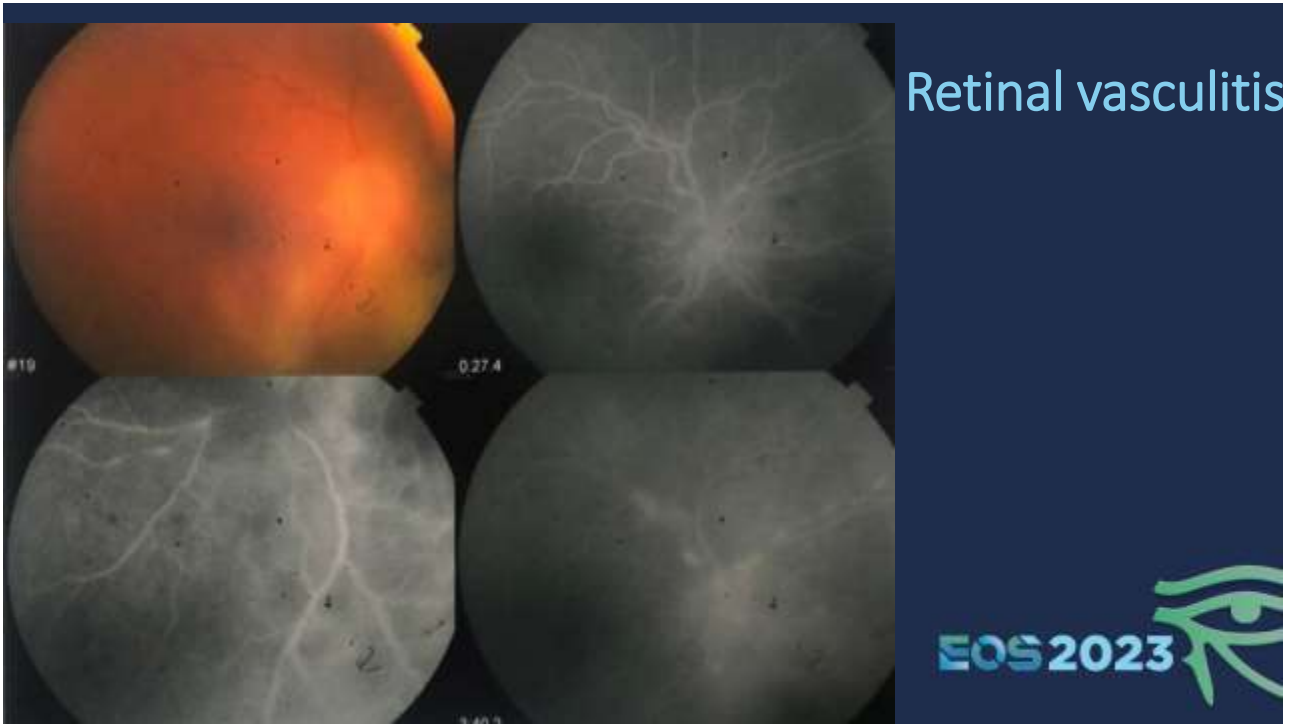
Multifocal choroido-retnitis

Patient in remission after a 9 months course of anti-TB therapy



Serpiginous-like TB choroiditis





Conclusion

- Relation of Eales' disease to TB is clear but causation is still to be proven (probably hypersensitivity reaction to mycobacteria) .
- Up to date; the aetiology of Eales' disease remains idiopathic.
- Steroids, laser treatment and vitrectomy are the *mainstay of* treatment in Eales' disease.
- Anti-TB therapy should be given in uveitis associated with latent or manifest TB.
- To diagnose TB uveitis ; TB-compatible uveitic syndrome should be present in association with positive testing and in absence of other possible causes of uveitis.

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