

DIAGNOSIS OF INTERMEDIATE UVEITIS



WHAT'S IN THIS VIDEO?

- Diagnosis of Intermediate uveitis
- Diagnosis based on history and systemic examination
- Etiology specific investigations
- Suspecting and diagnosing multiple sclerosis
- Suspecting and diagnosing sarcoidosis
- Suspecting and diagnosing Tuberculosis
- Suspecting and diagnosing Lymes disease and Cat scratch disease
- Specific ocular investigations
- Role of FFA, OCT and UBM



INFECTIVE

- Tuberculosis
- Lyme disease
- Cat scratch Fever
- Toxocariasis
- HTLV-1 infection (Hodgkin lymphoma virus type I)
- Syphilis

NON-INFECTIVE

- **UNDIFFERENTIATED**
- **SARCOIDOSIS**
- **MULTIPLE SCLEROSIS**
- **TUBERCULOSIS**

- Sarcoidosis
- Multiple sclerosis
- Inflammatory bowel disease
- Crohn disease
- Non-Hodgkin lymphoma



HISTORY AND REVIEW OF SYSTEMS

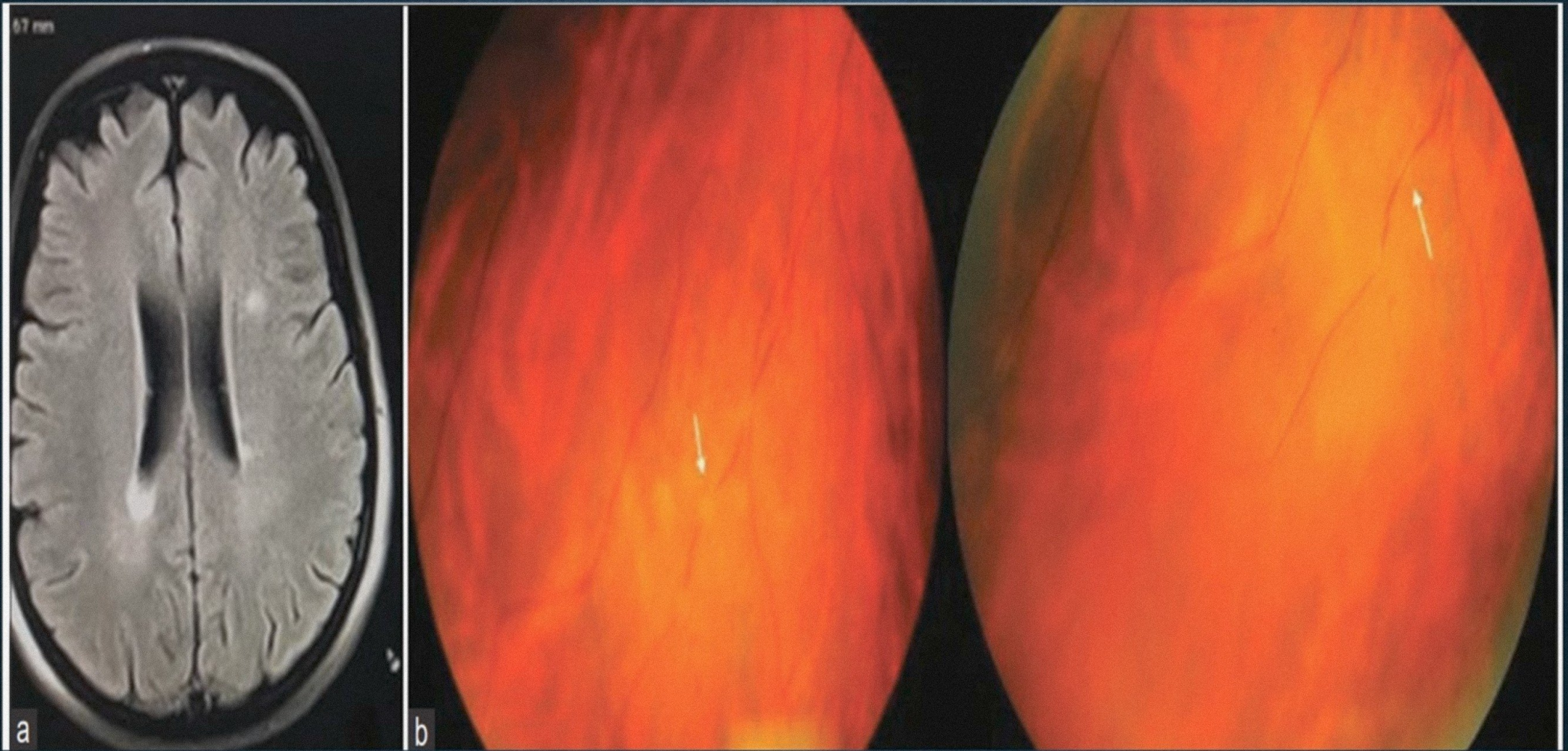
- Loss of sensitivity or paresthesia of the hands, arms, or leg
- Women
- Age 20-50
- Granulomatous Anterior Uveitis
- **H/o optic neuritis in past**

Multiple Sclerosis

**Neurological examination /
Neuroimaging for demyelination**

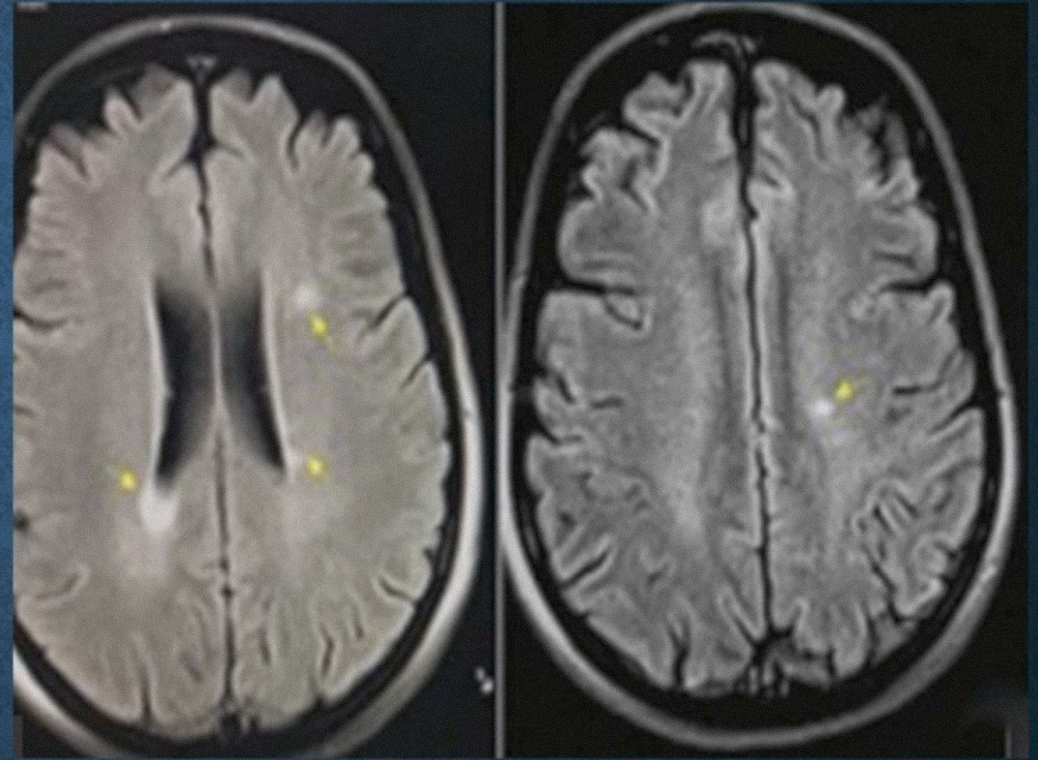
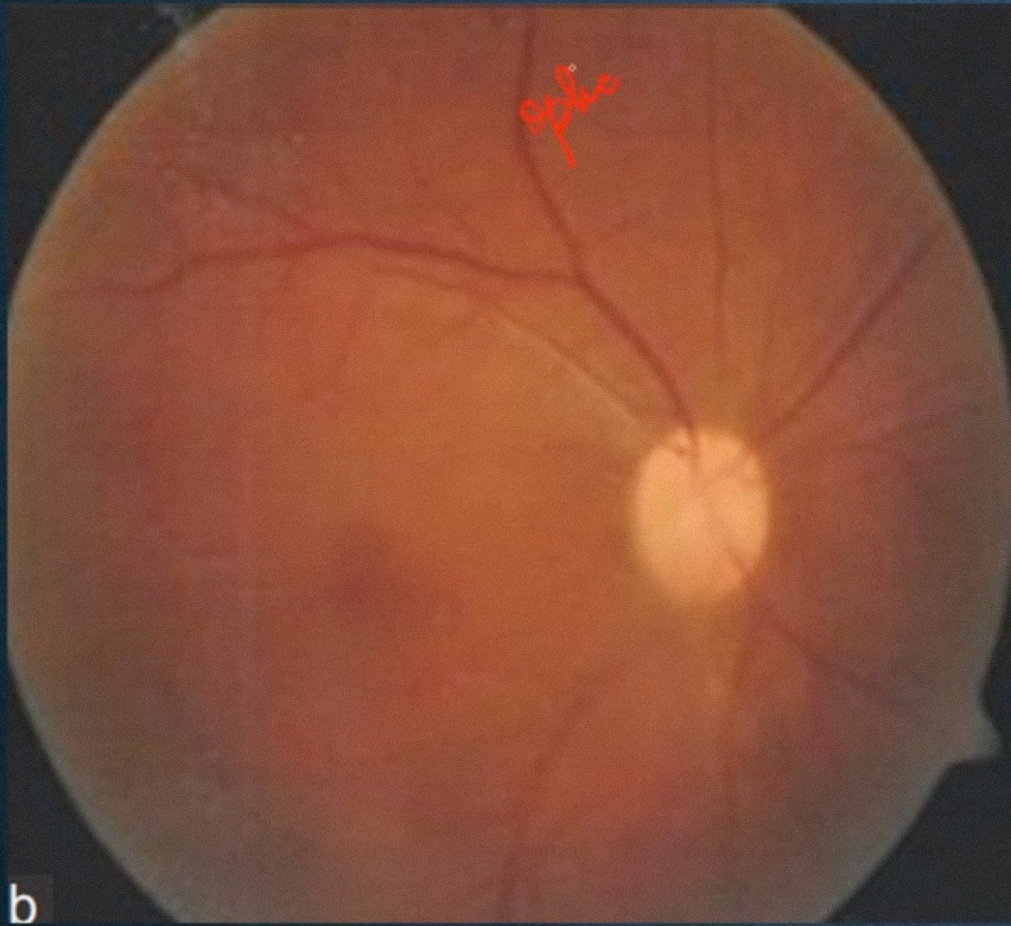
IU with Superior Vasculitis is a clinical predictor of MS





Babu, Kalpana¹; Janardhana, Geethanjali C²; Murthy, Krishna R^{1,2}. Multiple sclerosis-associated uveitis – A series from South India. Indian Journal of Ophthalmology (IJO):10.4103/IJO.IJO_1724_23, December 26, 2023. | DOI: 10.4103/IJO.IJO_1724_23





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Classification criteria for multiple sclerosis-associated intermediate uveitis

The Standardization of Uveitis Nomenclature (SUN) Working Group^{*,1,2,3}

Criteria

1. Evidence of intermediate uveitis

- a. vitreous cells AND/OR vitreous haze
- b. if anterior chamber cells are present, anterior chamber inflammation less than vitreous
- c. no evidence of retinitis or choroiditis

AND

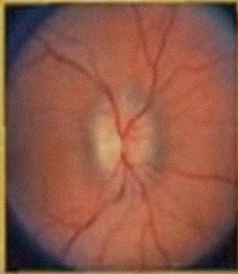
2. Evidence of multiple sclerosis using the Revised McDonald Diagnostic Criteria^{*}

Exclusions

1. Positive serology for syphilis using a treponemal test
2. Evidence of sarcoidosis (either bilateral hilar adenopathy on chest imaging or tissue biopsy demonstrating non-caseating granulomata)
3. Positive serology for Lyme disease, either IgG or IgM (e.g. positive ELISA AND Western blot with requisite number of bands for assay used)



TREATMENT OF OPTIC NEURITIS



INTRAVENOUS STEROIDS
IMMUNOSUPPRESSION
PLASMAPHERESIS
AND MORE

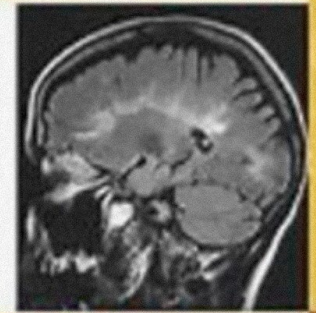
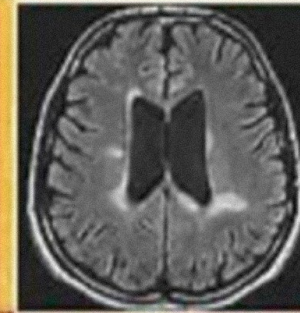
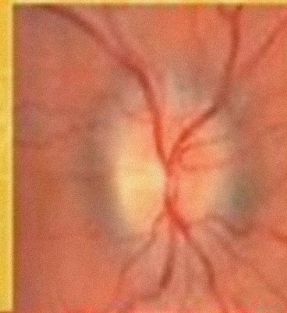
ONTT (OPTIC NEURITIS TREATMENT TRIAL) 22:23

Treatment of optic neuritis and multiple sclerosis

7.7K views · Mar 24, 2022

YouTube › Insight Ophthalmology

OPTIC NEURITIS MADE SUPER EASY!



TYPICAL vs ATYPICAL OPTIC NEURITIS 47:03

OPTIC NEURITIS || Typical optic neuritis and atypical optic neuritis

17.8K views · Mar 23, 2022

YouTube › Insight Ophthalmology



SARCOIDOSIS



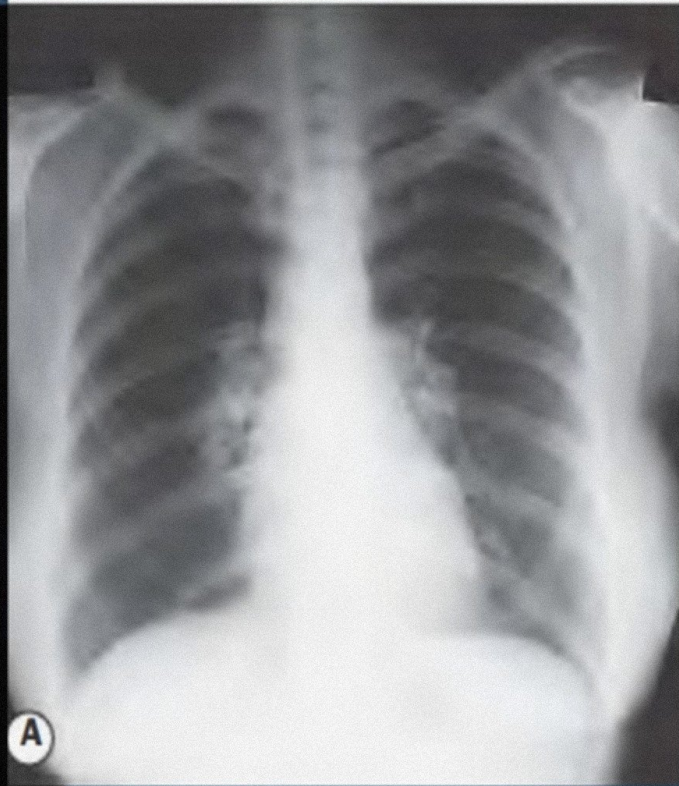
Fever, fatigue,
or night
sweats →
Sarcoidosis
and
tuberculosis

- Systemic examination
- Schirmer's Test
- CT chest and Mantoux test → (-ve)
- Serum ACE



*B/L
Hilus lymph*

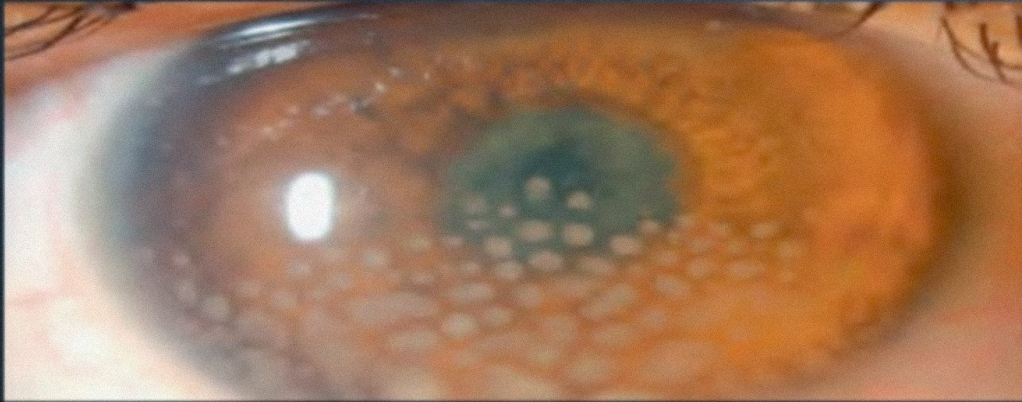




**BILATERAL HILAR
LYMPHADENOPATHY**

ERYTHEMA NODOSUM





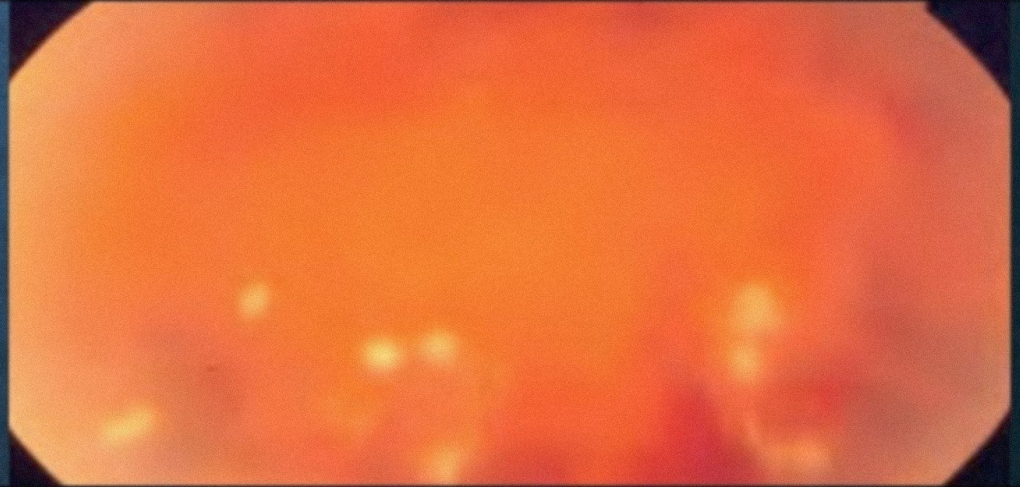
**Granulomatous Mutton fat Keratic
Precipitates**



Iris Nodules

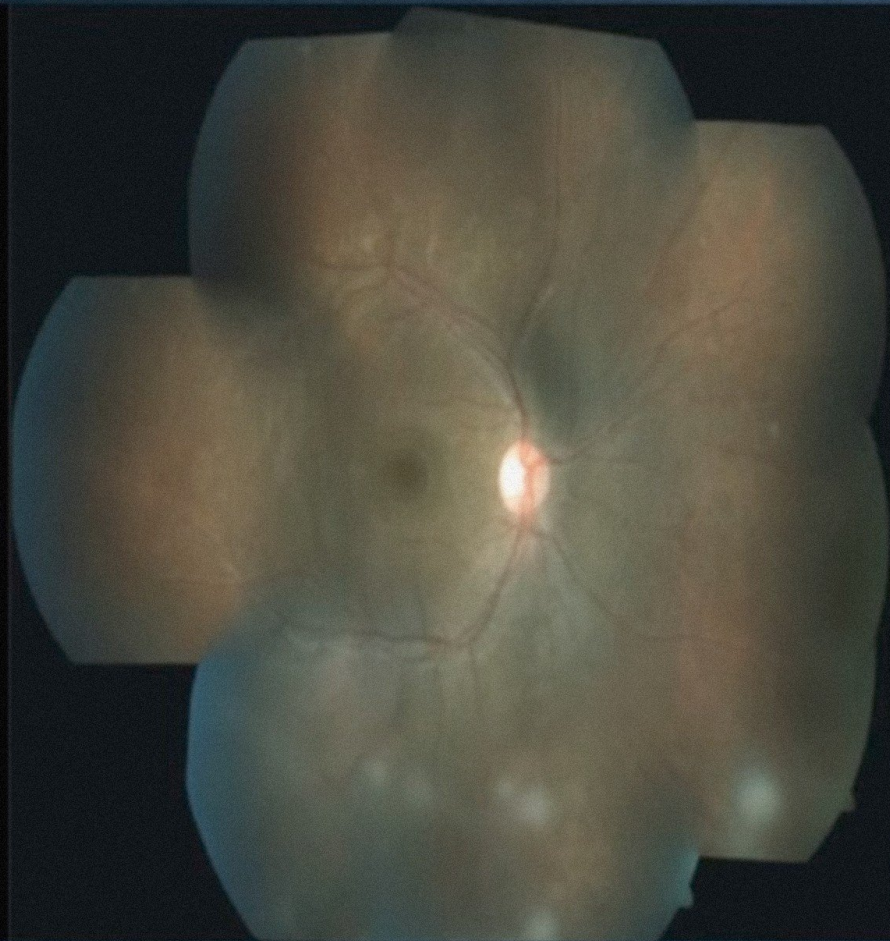


Nodules in Trabecular Meshwork



Snowballs





Ramdoss, Jeyasooriya; Jain, Anupreeti¹; Thejesvi, GN²; Biswas, Jyotirmay³,. Prevalence, clinical profile, investigations, and visual outcome of sarcoid intermediate uveitis in a tertiary eye care center in South India. *Indian Journal of Ophthalmology* 70(7):p 2454-2457, July 2022. | DOI: 10.4103/ijo.IJO_3099_21



- ✓ Fever
- Fatigue,
- ✓ Night sweats
- Chronic cough
- ✓ Endemic area
- ✓ History of contact
- ✓ Weight loss →
tuberculosis



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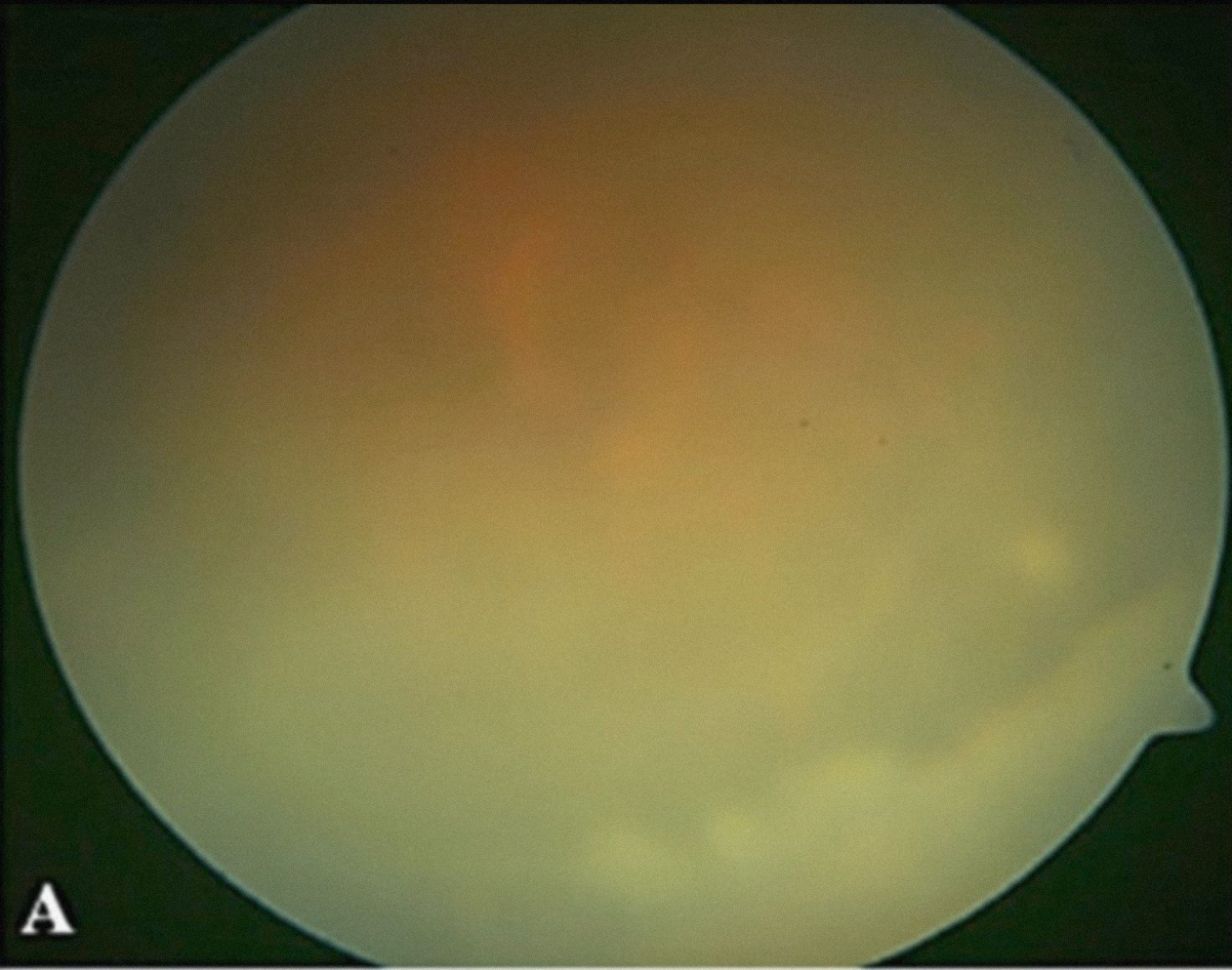
- Chest X ray
- Mantoux test
- HRCT
- Quantiferon
Gold
- Immunoglobulin
gamma release
assay



TUBERCULOSIS

- Occlusive vasculitis
- Subvascular scars
- Tortuosity of vessels





Unilateral snow banking in tuberculosis-related intermediate uveitis

Kalpana Babu¹, Soumya S Bhat



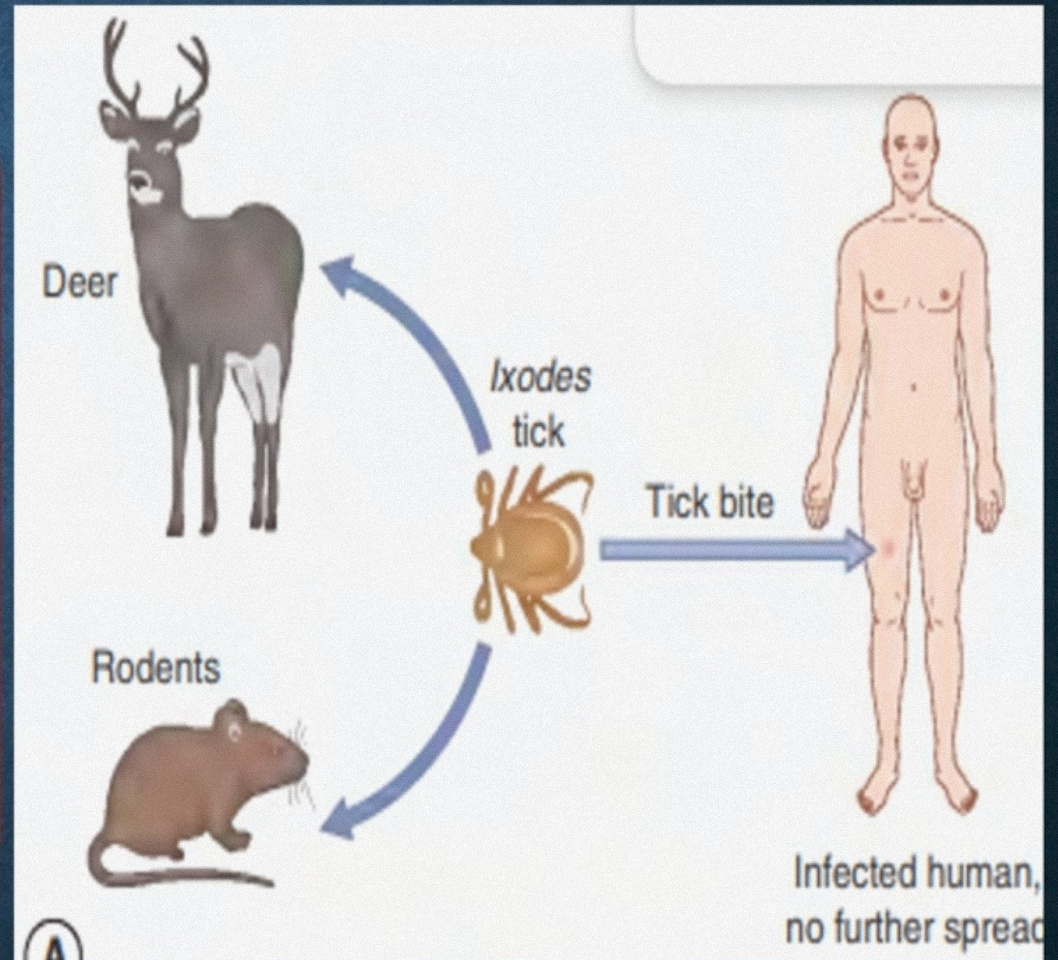
LYMES DISEASE

Aka Borelliosis



History of Tick bite
and arthritis of
knee → **Lymes
disease**

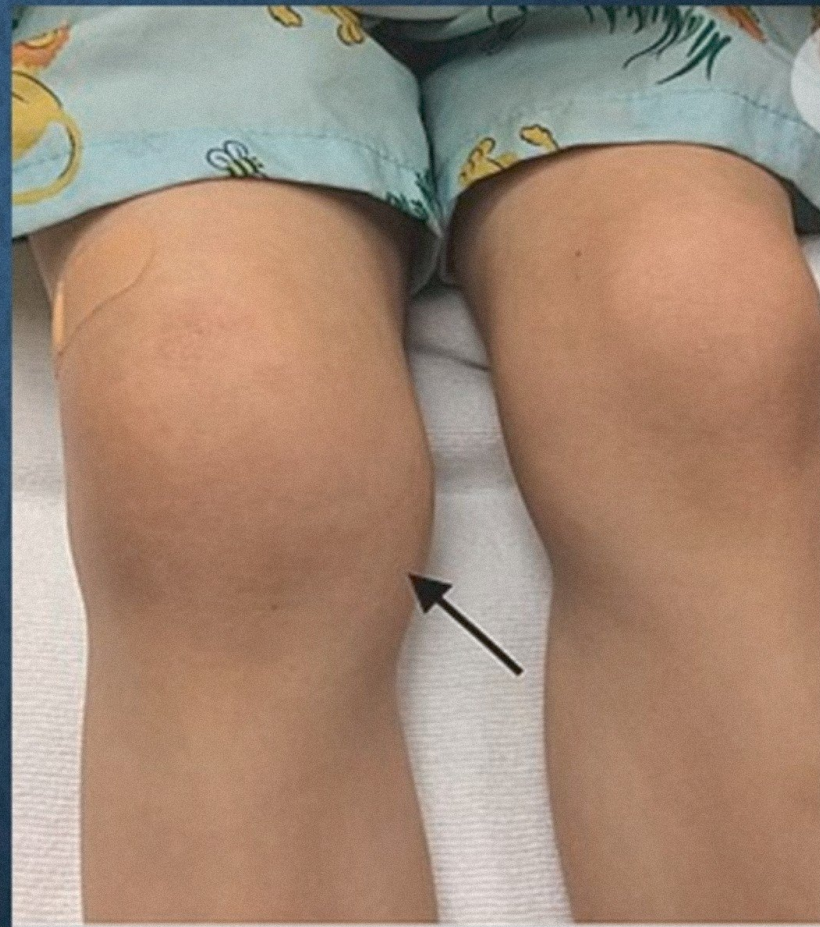
- Associated anterior Uveitis
- Nodular Episcleritis
- Lymes Serology



**SEVERE ERYTHEMA CHRONICUM
MIGRANS**



LYMES ARTHRITIS



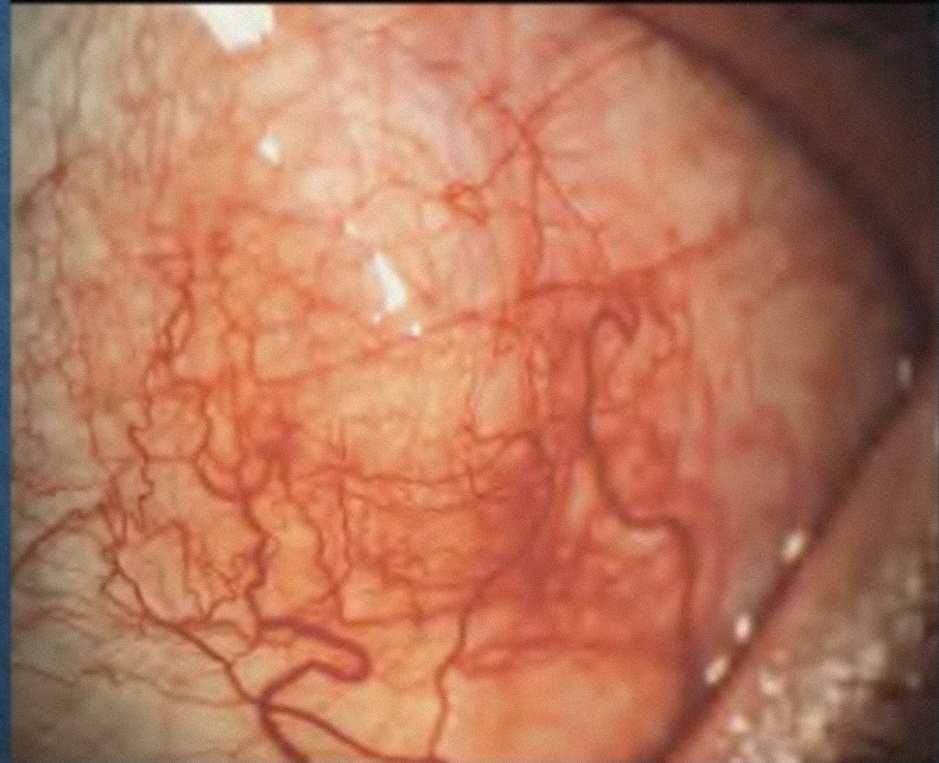
TICK ATTACHED TO EYELASH



**SEVERE ERYTHEMA CHRONICUM
MIGRANS**



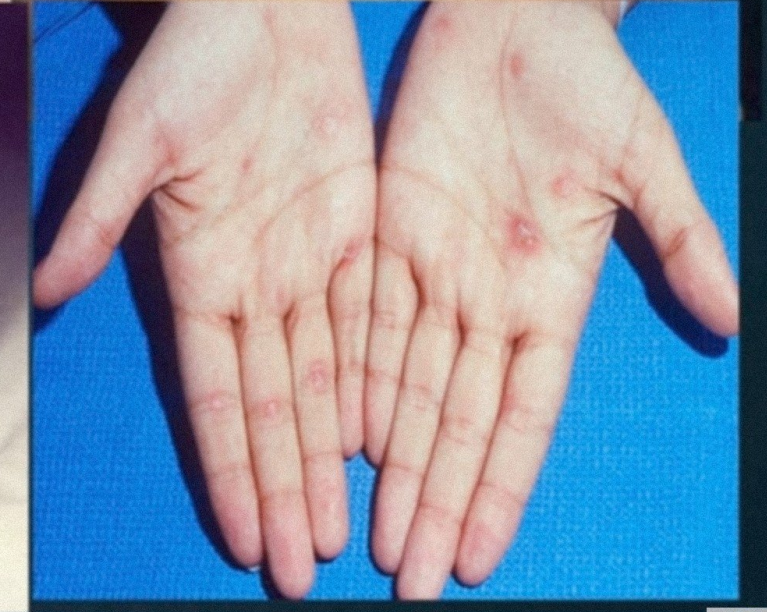
NODULAR EPISCLERITIS



SYPHILIS



Signs of
dermatitis →
**Lymes disease,
Tb, Syphilis**



TESTS FOR SYPHILIS

- **TPHA** (Treponema pallidum hemagglutination assay)

- **FTA-ABS** (Fluorescent treponemal antibody-absorption)—

→ More Sensitive and used for screening

VDRL : Venereal disease research laboratory

- More specific
- Not for screening
- Used for guiding treatment response



CAT SCRATCH DISEASE



- History of cat scratch
- Preauricular lymphadenopathy
- Conjunctival granuloma
- → **BARTONELLA HENSELAE → CAT SCRATCH DISEASE**

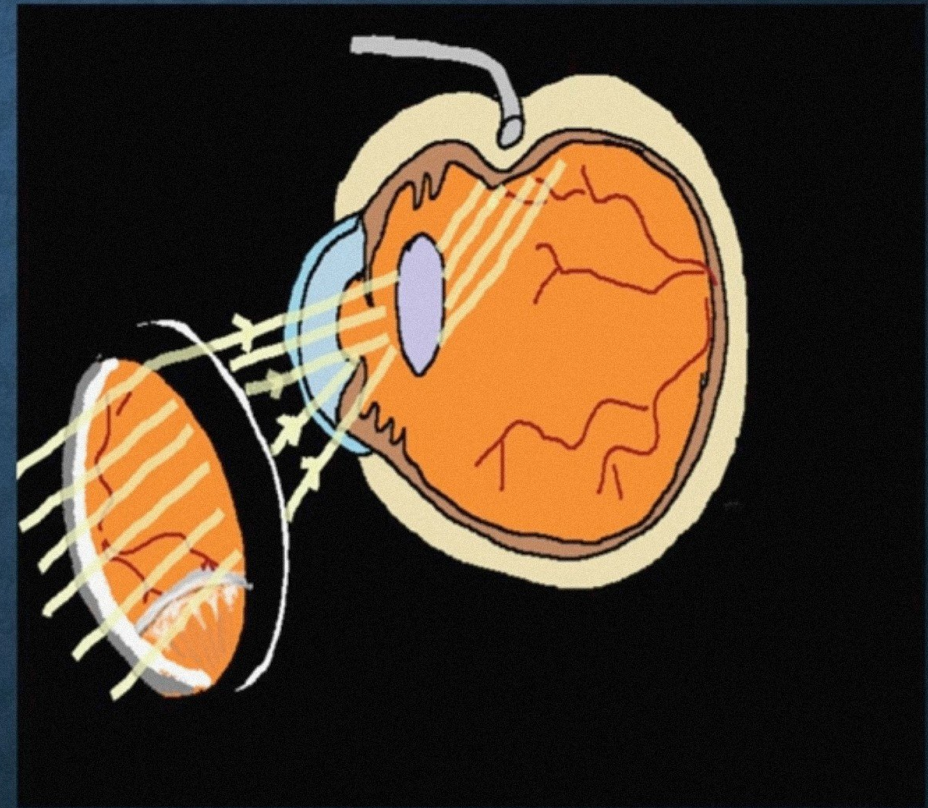


Fig. 12.72 Cat-scratch disease – ulcerated papule on the cheek caused by a cat scratch 2 weeks previously, with enlargement of submandibular lymph nodes
Courtesy of BJ Zitelli and HW Davis, from Atlas of Pediatric Physical Diagnosis, Mosby 2002)



INVESTIGATIONS

- Measurement of visual acuity and slit lamp biomicroscopy
- Measurement of the intraocular pressure
- Fundus examination with scleral depression is mandatory in patients with uveitis.
- The **Amsler grid** has been shown to mirror the presence of macular edema quite well, and we always suggest the grid to patients for self-monitoring.

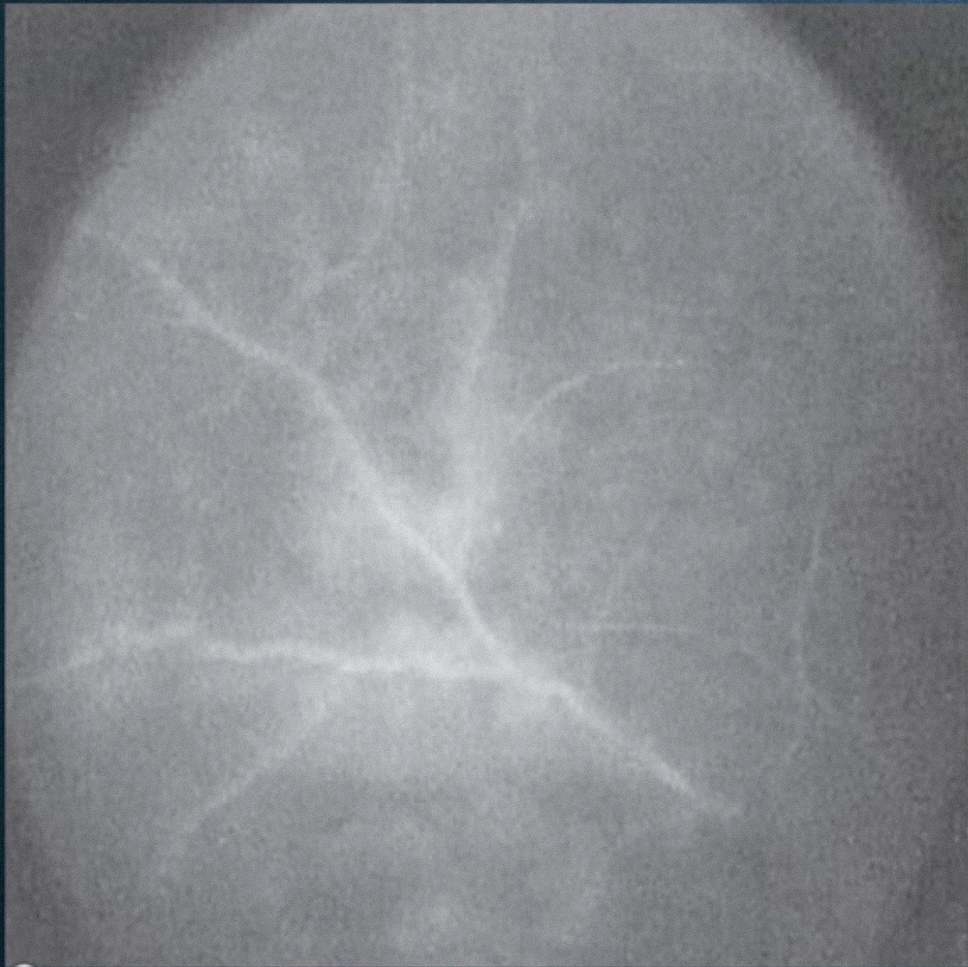


ROLE OF FLUORESCEIN ANGIOGRAPHY AND OCT

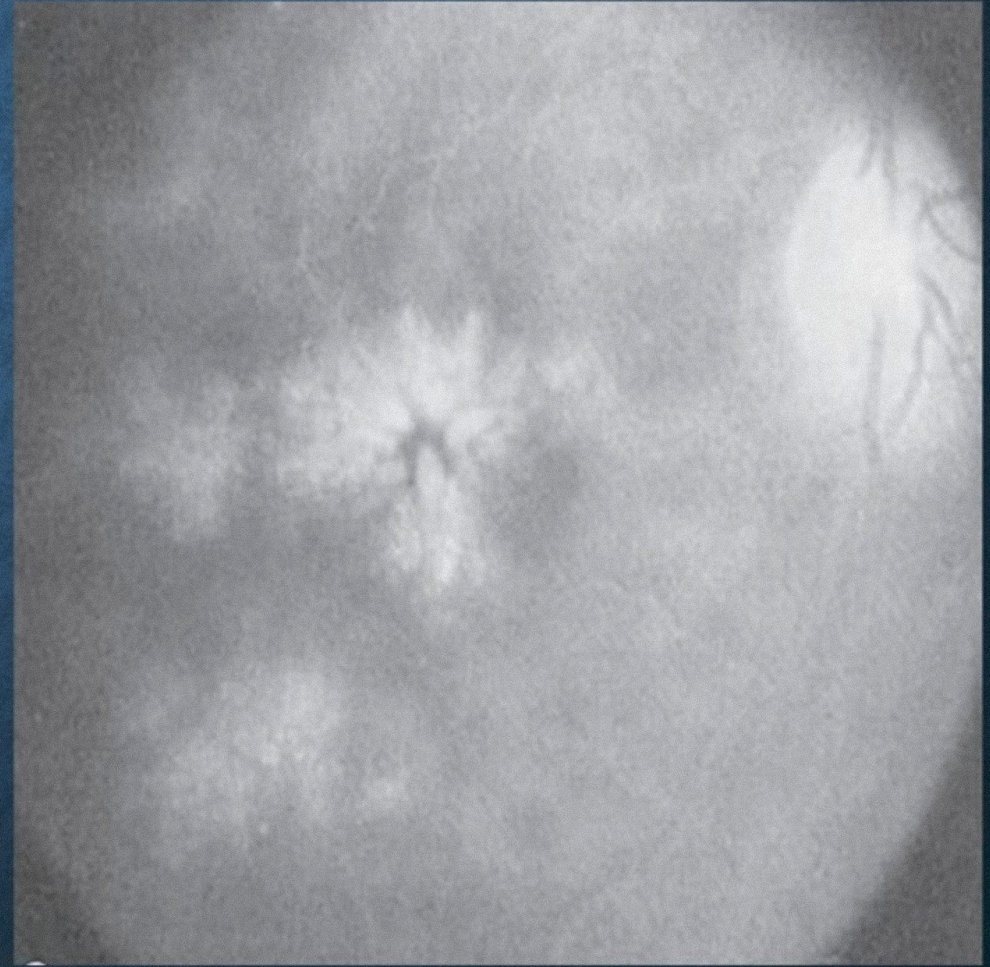
- To assess the presence and extent of cystoid macular edema (CME)
- To examine the retinal vasculature for signs of perivasculitis.
- To disclose areas of retinal nonperfusion and neovascularization
- Shows Disc Hyperfluorescence → Sign of activity



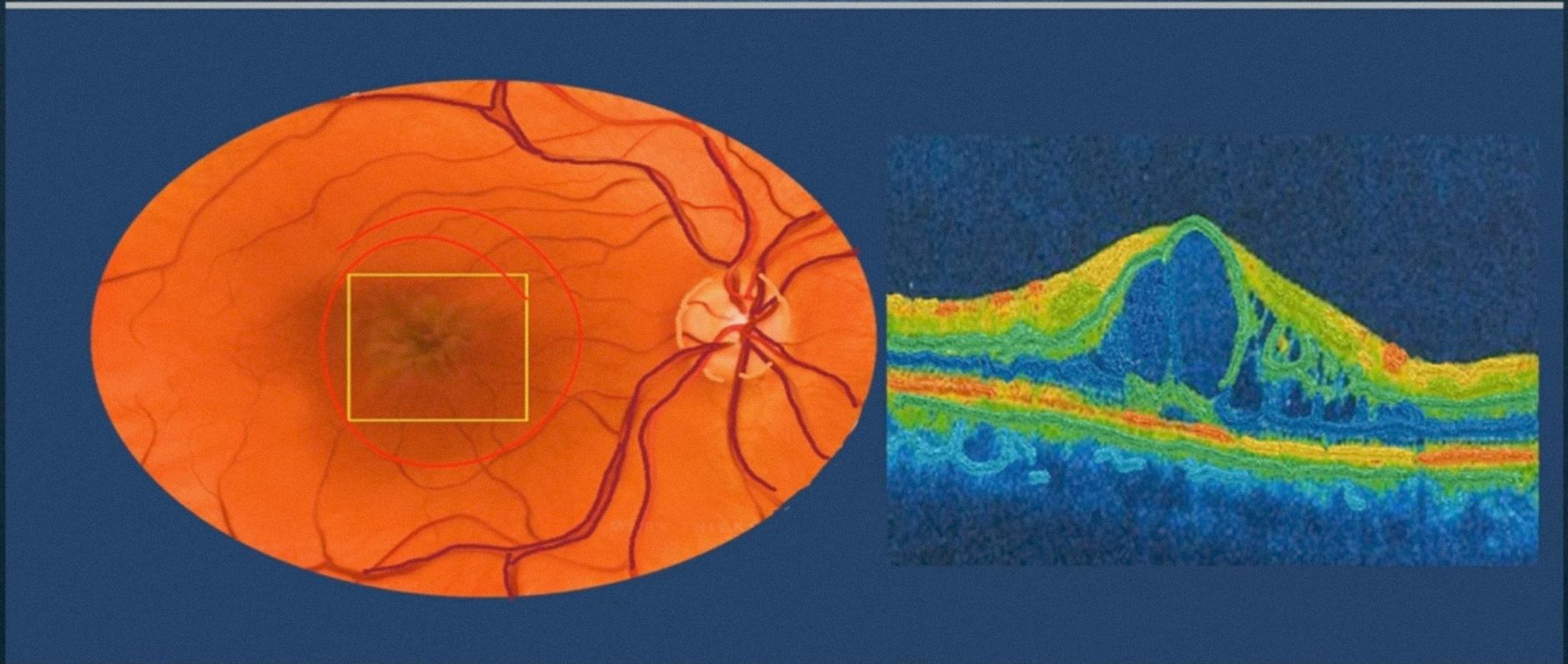
**PERI PHLEBITIS – LEAKAGE OF DYE
FROM PERIPHERAL RETINAL VESSELS**



**PROMINENT CYSTOID MACULAR
EDEMA**



ROLE OF OCT



ULTRASONOGRAPHY

- UBM → **cyclitic membranes**
- Extent of vitreous debris when the view of the posterior pole is obscured by cataract
- Vitreoretinal adhesions that are not observed clinically.
- Toxocara Granuloma

