

# Uveitis Screening in Patients with Rheumatologic Disease

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TEHRAN UNIVERSITY  
OF  
MEDICAL SCIENCES



- How to refer a rheumatologic patient to ophthalmologist?
- Who needs to be referred for uveitis screening?
- How should ophthalmologist approach to the referred patients?

# How to refer a patients?

- Provide adequate information.
- Specify the reason of referral as precisely as possible: diagnosis? assessing the adequacy of treatment? Ocular complaint by the patient?...
- Refer to a qualified specialist.

# Who needs to be referred for uveitis screening?

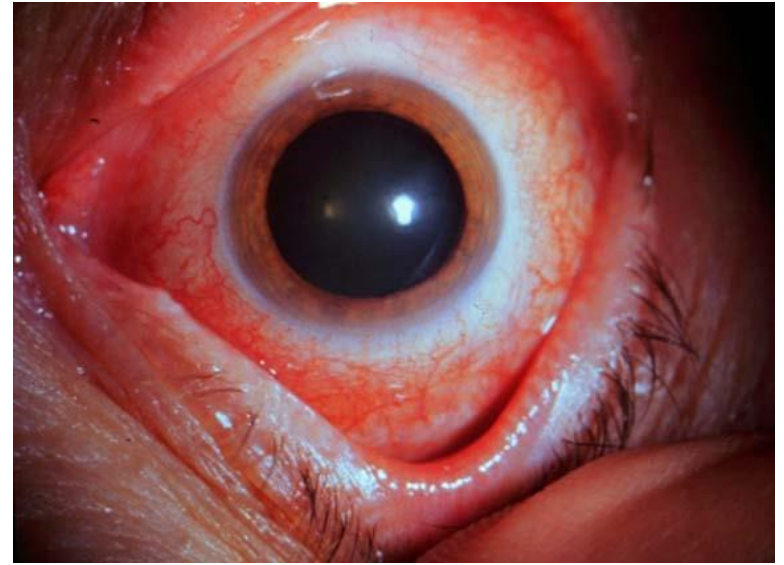
- Every patients with ocular symptoms or signs.
- Patients with some special rheumatologic diseases.

# Ocular symptoms

- Vision loss: any complaint regarding visual acuity or quality of vision.
- Ocular pain
- Photophobia
- Floaters
- Photopsia

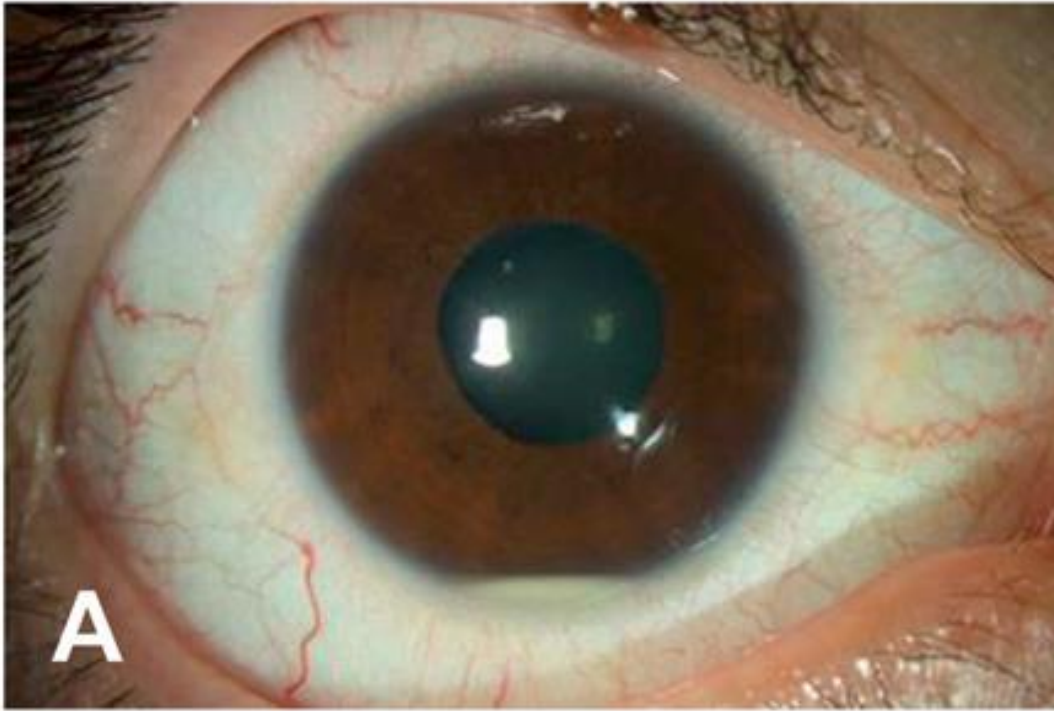
## Ocular signs

- Change in the color of normally white ocular surface, including red eye.



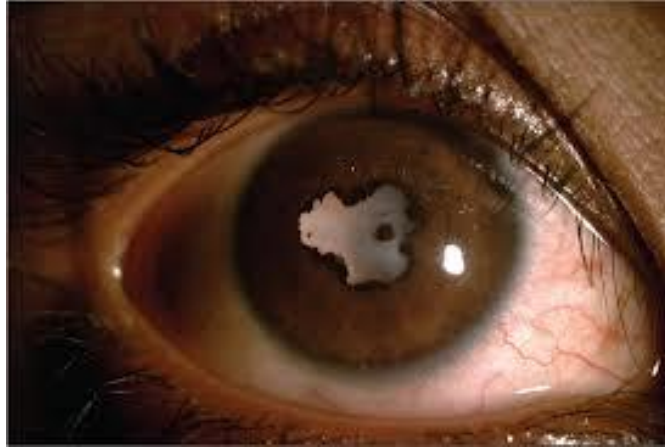
# Ocular signs

- Hypopyon

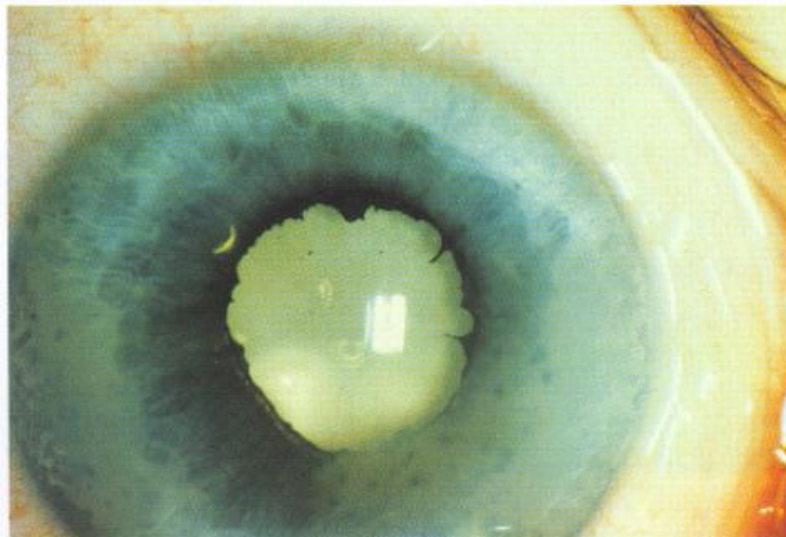


# Ocular signs

- Synechiae



- Calcific band keratopathy



- Cataract



# Special Diseases: JIA

- Typical ocular involvement:

“white” eyes

anterior segment involvement

# Special Diseases: JIA

| Type                            | ANA | Age at Onset, y | Duration of Disease, y | Risk Category | Eye Examination Frequency, mo |
|---------------------------------|-----|-----------------|------------------------|---------------|-------------------------------|
| Oligoarthritis or polyarthritis | +   | ≤6              | ≤4                     | High          | 3                             |
|                                 | +   | ≤6              | >4                     | Moderate      | 6                             |
|                                 | +   | ≤6              | >7                     | Low           | 12                            |
|                                 | +   | >6              | ≤4                     | Moderate      | 6                             |
|                                 | +   | >6              | >4                     | Low           | 12                            |
|                                 | –   | ≤6              | ≤4                     | Moderate      | 6                             |
|                                 | –   | ≤6              | >4                     | Low           | 12                            |
|                                 | –   | >6              | NA                     | Low           | 12                            |
| Systemic disease (fever, rash)  | NA  | NA              | NA                     | Low           | 12                            |

# Special Diseases: Behcet's disease

- Diagnostic system of BD disease suggested by The International Study Group for Behçet's disease:

Recurrent oral aphthae (at least three times per year) plus two of the following:

Recurrent genital ulcers

Skin involvement

Ocular inflammation

Positive pathergy test

# Special Diseases: Behcet's disease

- Diagnostic system of BD disease suggested by The International Study Group for Behçet's disease:

Recurrent oral aphthae (at least three times per year) plus two of the following:

Recurrent genital ulcers

Skin involvement ; “typically defined skin lesions”

Ocular inflammation; “typically defined eye lesions”

Positive pathergy test

# Typical Behcet Uveitis

A relapsing and remitting, bilateral  
nongranulomatous panuveitis with retinal  
vasculitis

- Many ocular findings in BD can **resolve** spontaneously or with slightest therapeutic intervention in **few days or weeks**.

An important exception is.....

# Retinal vasculitis

Retinal vasculitis may be  
disproportionate to clinical ocular  
inflammation

# The ophthalmologist expected to:

- 1- perform complete ocular **examination** for **all** patients.
- 2- use **additional modalities (imaging....)** in **some** patients.
- 3- determine the **existence** of ocular inflammation.
- 4- define the present ocular inflammation as precisely as possible.
- 5- provide **a list of possible DDx** (if the diagnosis is in question).
- 6- administer **local anti inflammatory treatments**, if necessary.
- 7- manage ocular complications (cataract, glaucoma,...).
- 8- **recommend changes in systemic medication**.
- 9- and finally, arrange a followup schedule.

Who needs fluorescein  
angiography (FA)

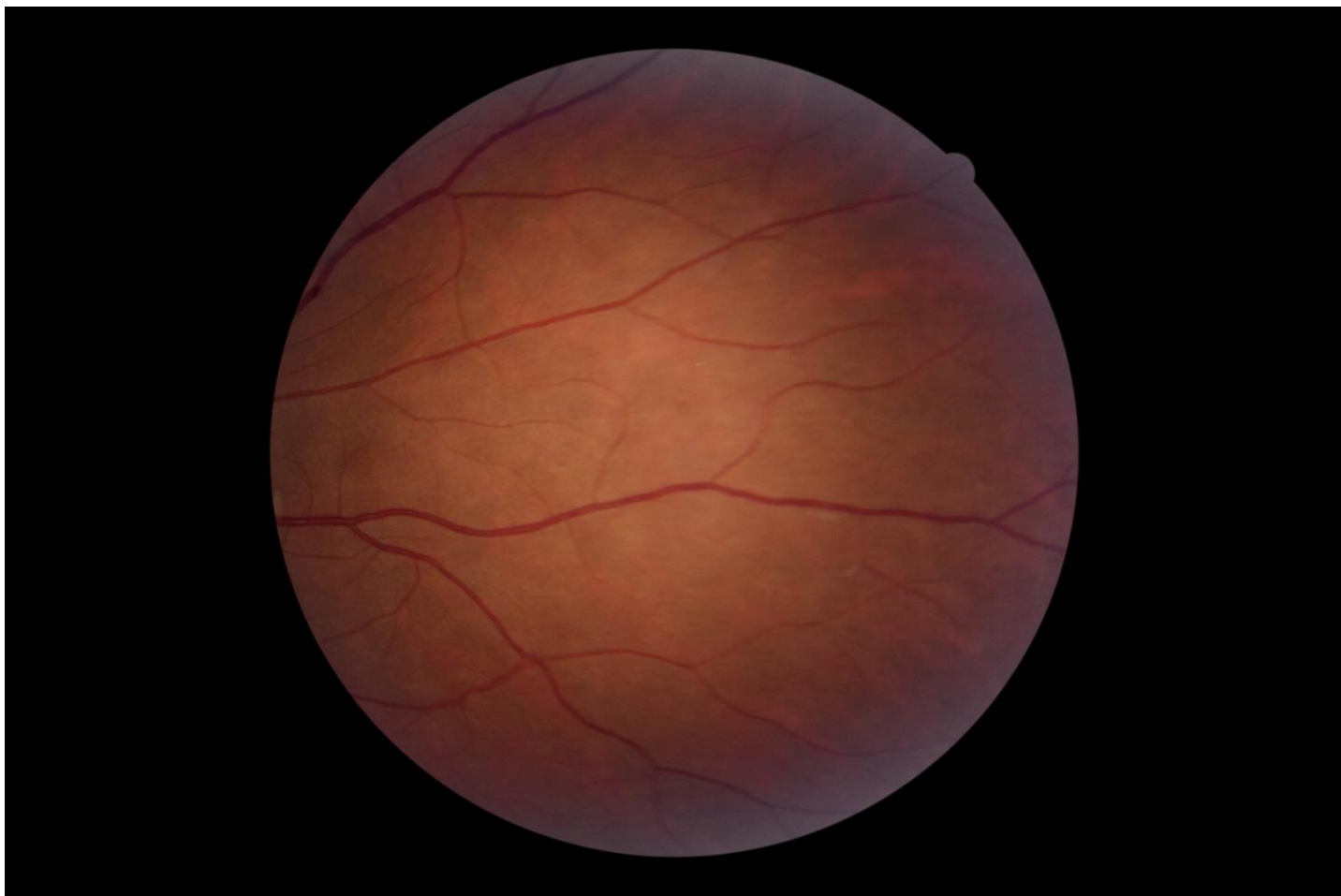
# Indications of FA in **diagnosis** of uveitis

- All patients with **intermediate/posterior/panuveitis** need an FA in initial evaluation.
- When there is suspicion for a disease which **typically involve retinal vessels (Behcet disease)**.
- **Unusual clinical course: severe, refractory, recurrent cases!**
- **Hazy media!**

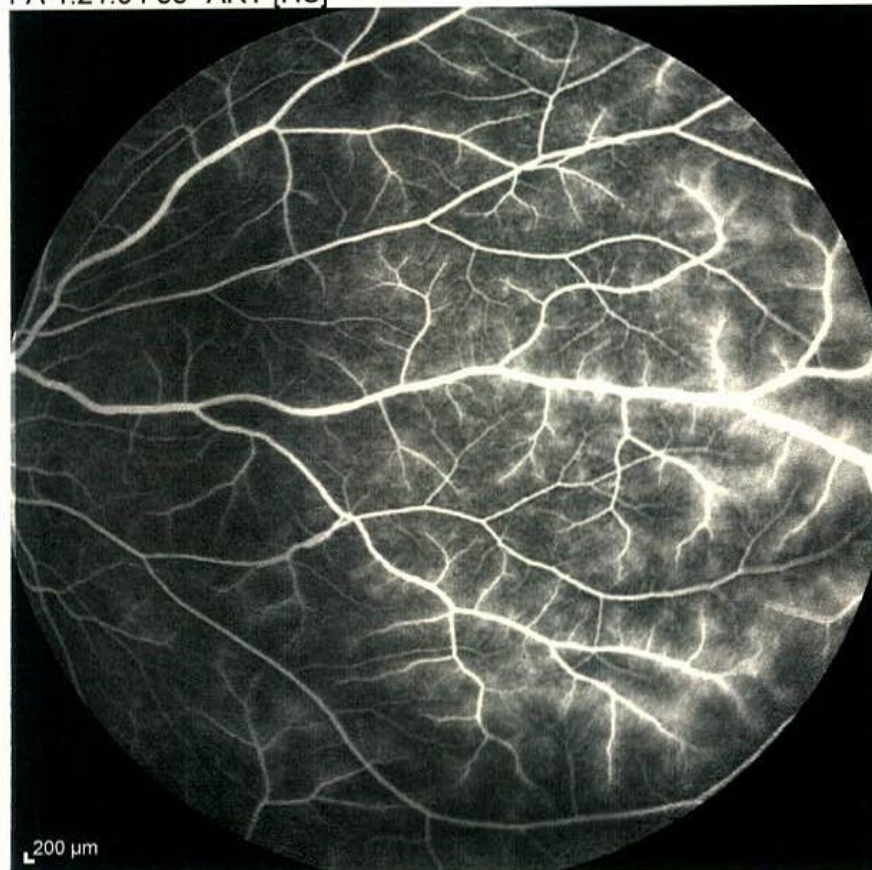
# Indications of FA in followup of uveitis

- When the goal is monitoring of retinal vascular involvement.

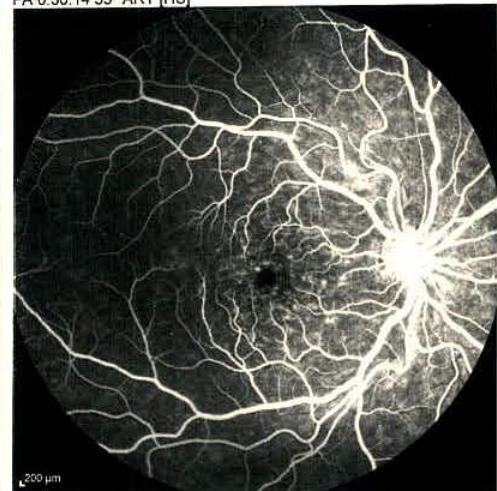
FA is the gold standard imaging modality in retinal vascular diseases.



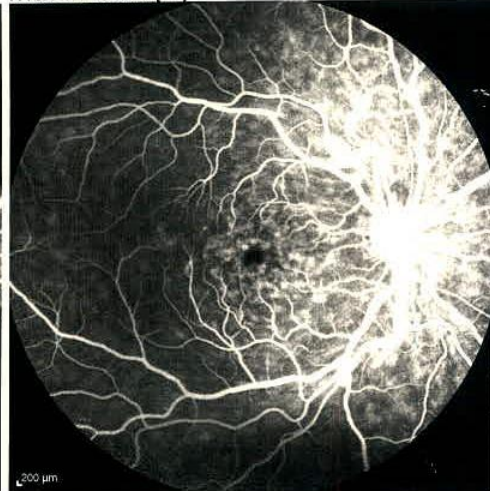
FA 1:21.94 55° ART [HS]



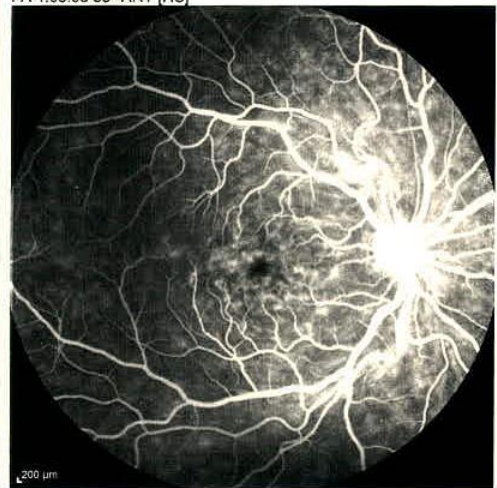
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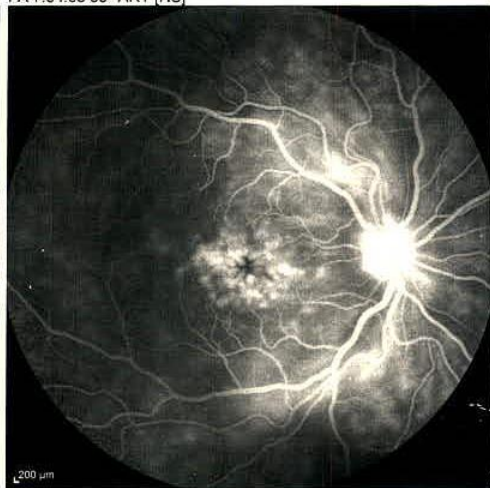
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FA 1:05.96 55° ART [HS]

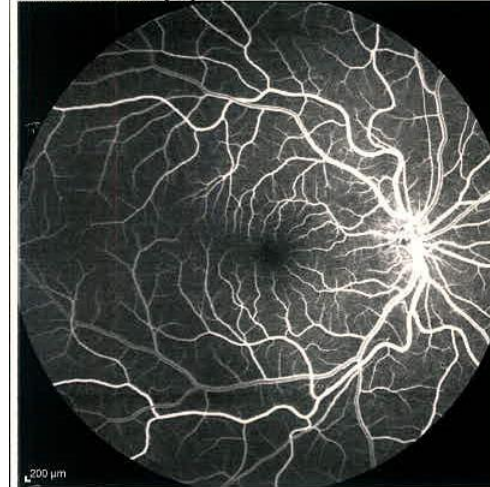


FA 7:54.03 55° ART [HS]

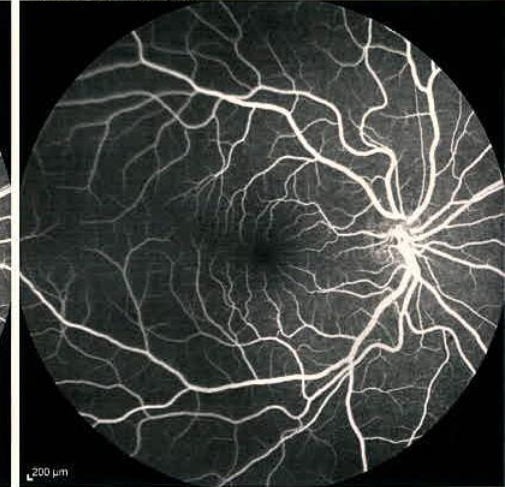


2 months Rx

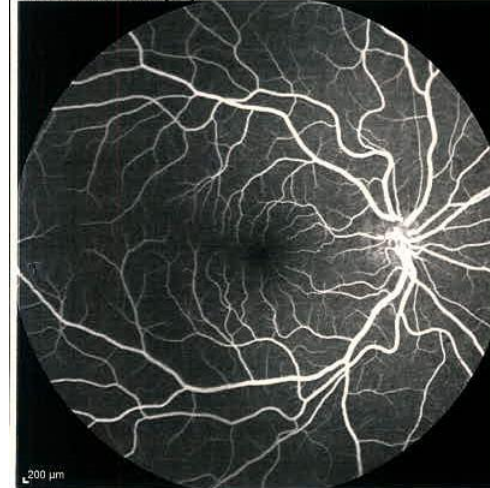
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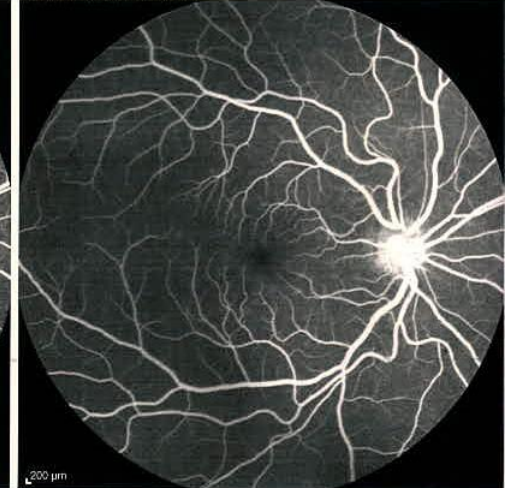
FA 0:24.40 55° ART [HS]



FA 1:01.58 55° ART [HS]



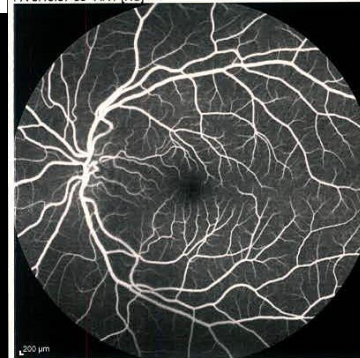
FA 5:01.19 55° ART [HS]



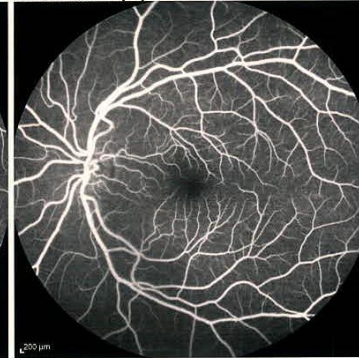
- The **slightest** inflammation of retinal vessel walls allows the small fluorescein molecule to leak out of vessels and FA is therefore very sensitive to detect retinal vasculitis.



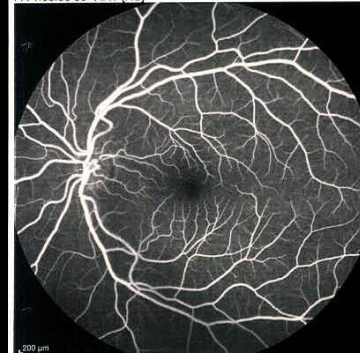
FA 0:19.07 55° ART [HS]



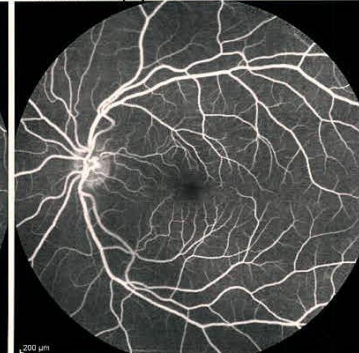
FA 0:30.29 55° ART [HS]



FA 1:06.68 55° ART [HS]



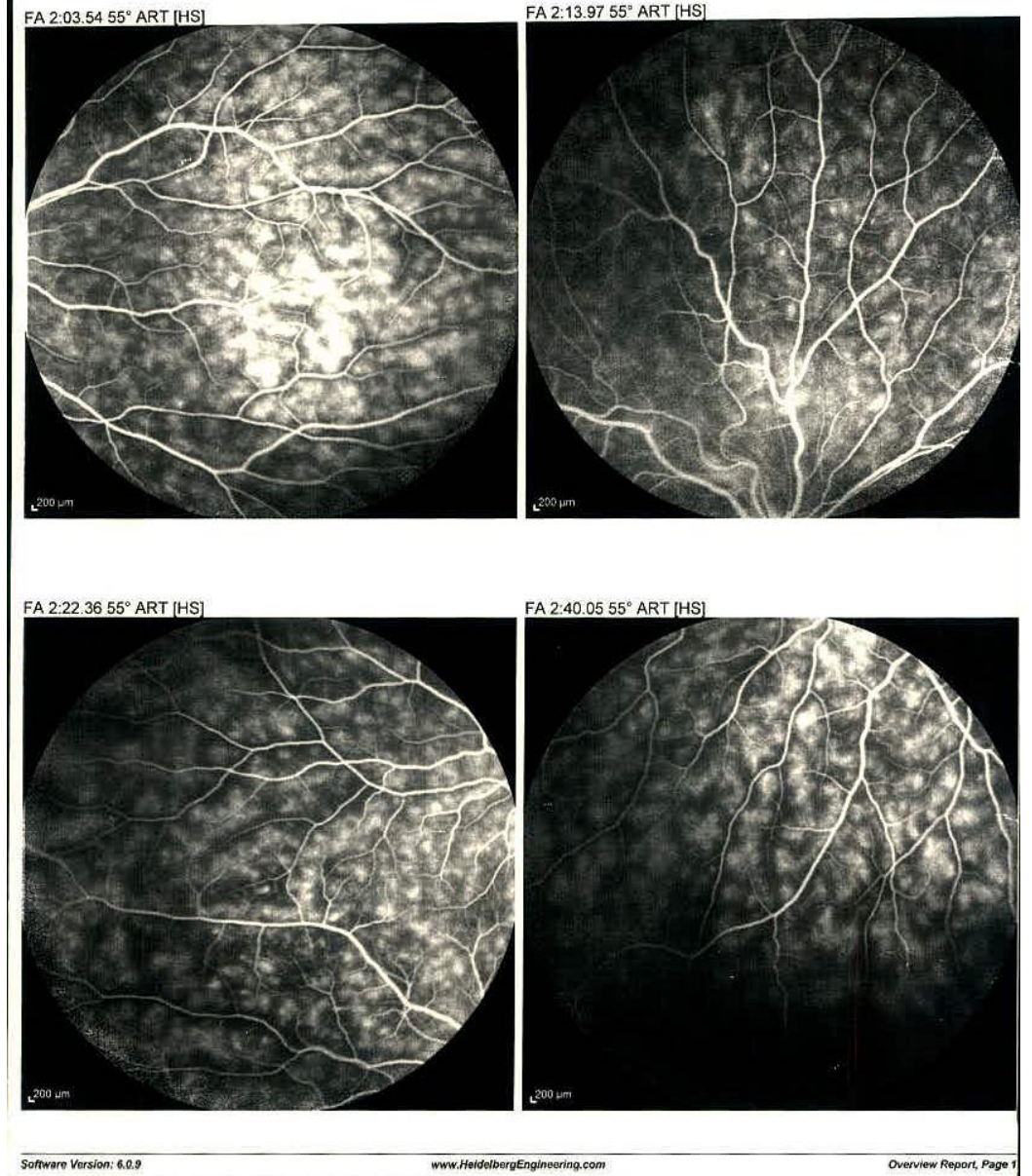
FA 5:07.96 55° ART [HS]



FA 1:30.37 55° ART [HS]



- Small vessel vasculitis:  
very common in Behcet's disease.



**Thank You**