

Uveitis: **TB**

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- 2) The profiled case is meshed
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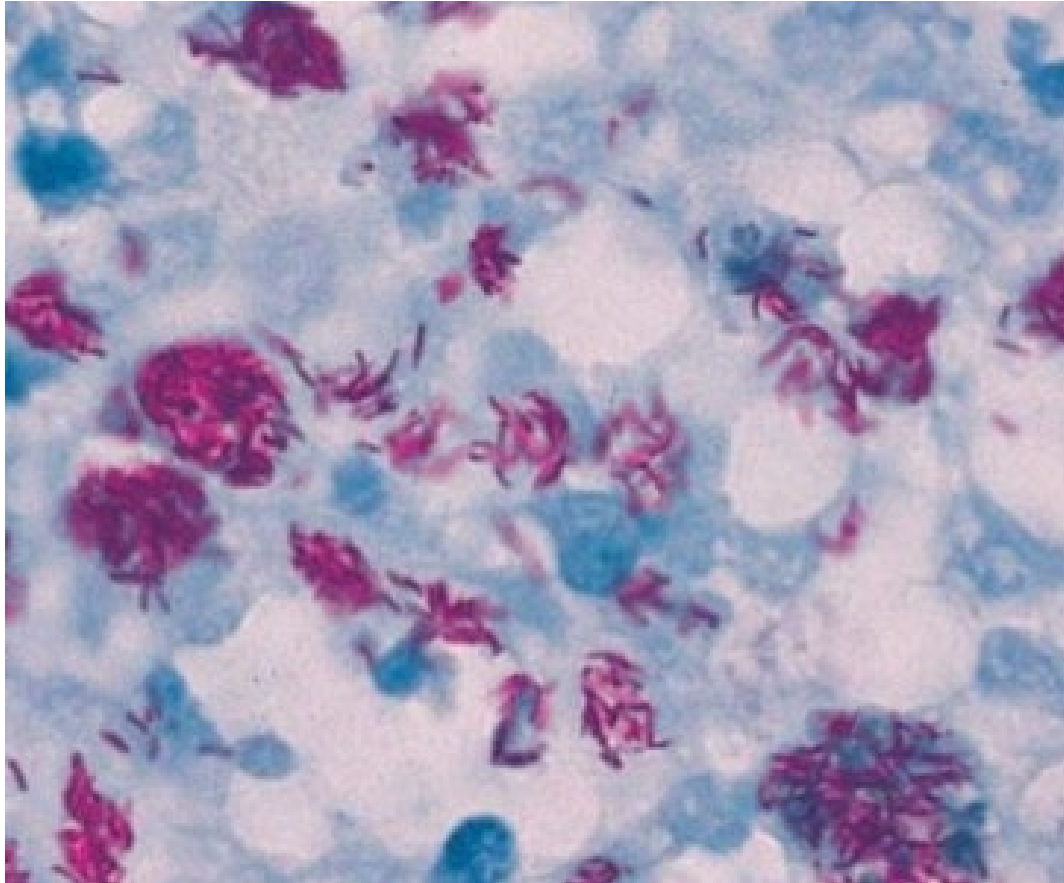
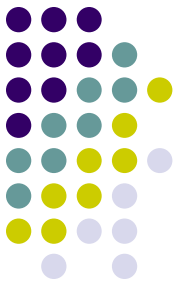
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M tuberculosis, acid-fast stain

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- Recently emigrated from a developing nations
- Advanced age
- Marginal living conditions (eg, homeless; malnourished)

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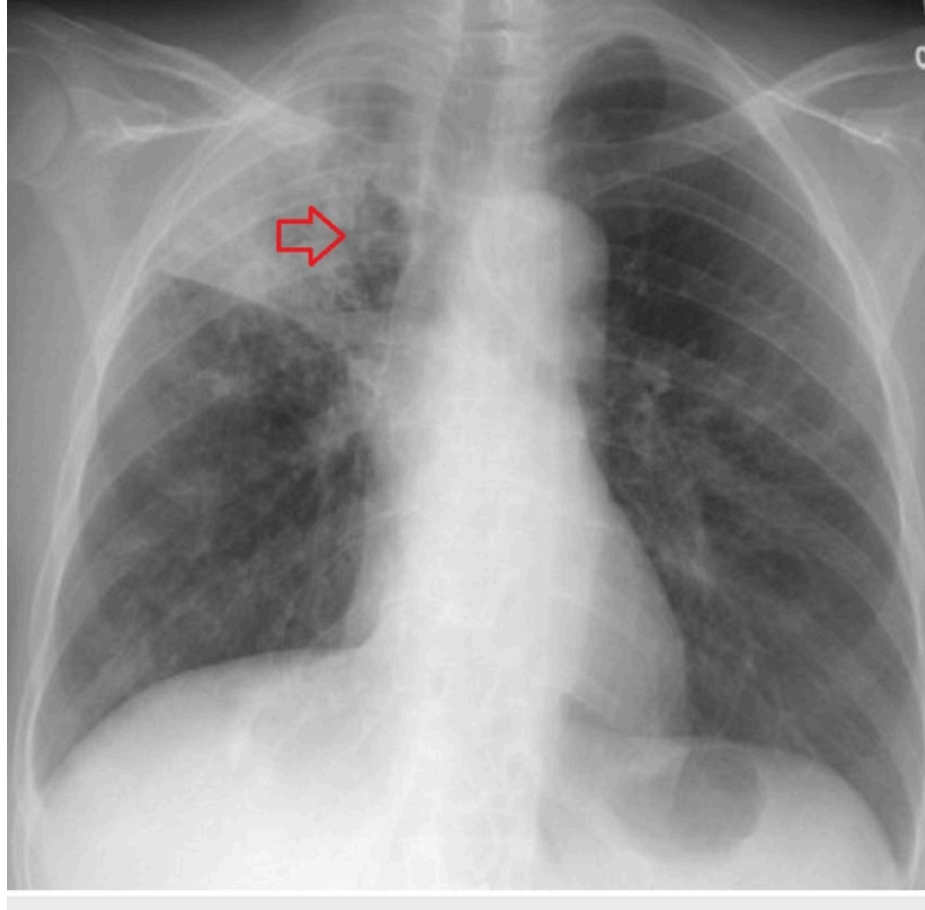
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TB: Cavity in the right lung apex with evidence of consolidation

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TB thrives under conditions of high O₂ tension, and pulmonary O₂ levels are highest at the apices

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Foreshadowing alert!

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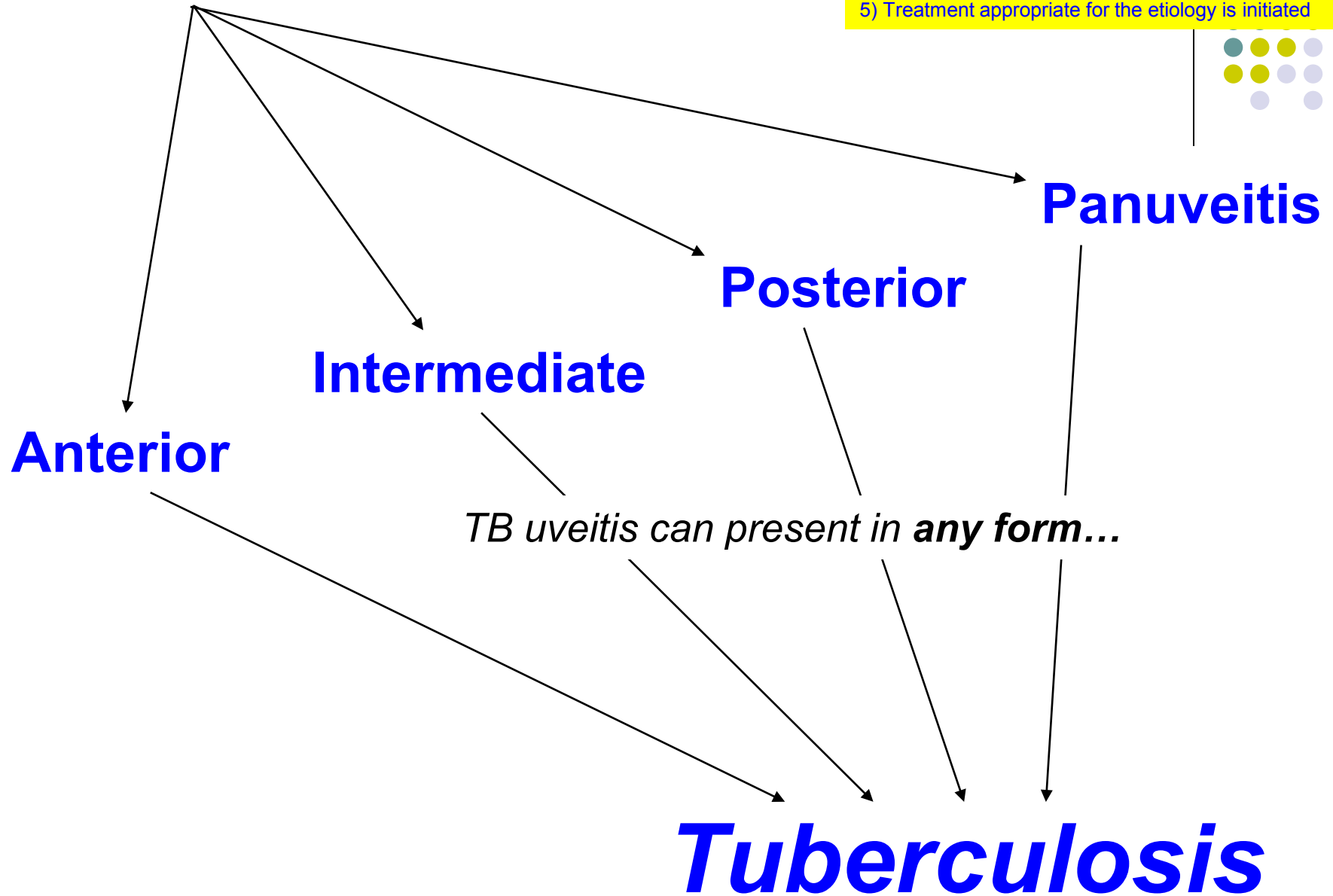
Fever, night sweats and weight loss

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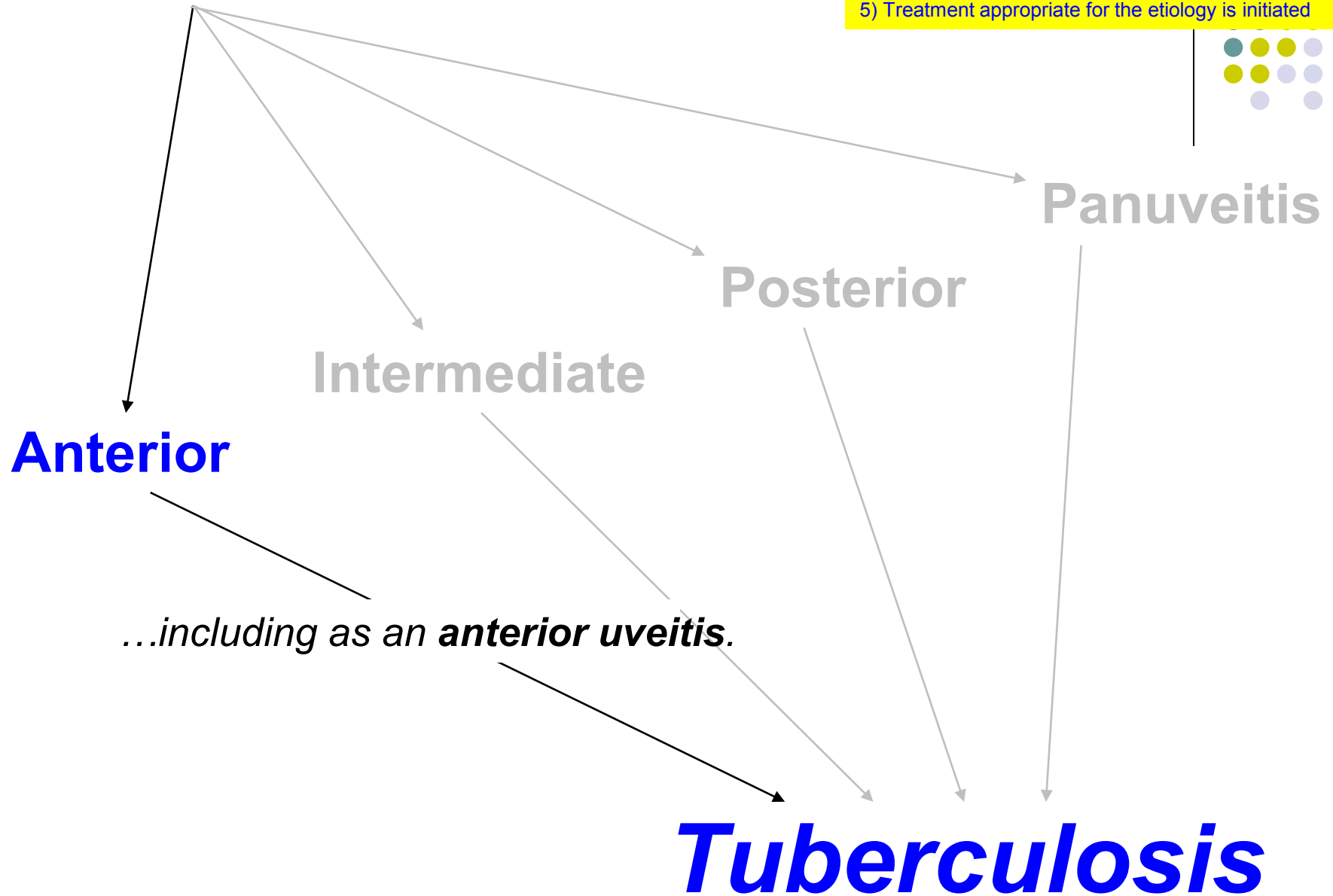
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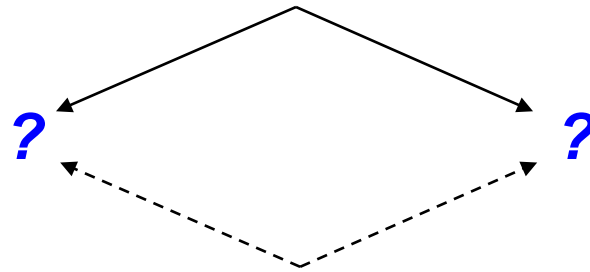


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(Start here, with the first distinction the book makes)

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Uveitis: *Anterior*

Granulomatous

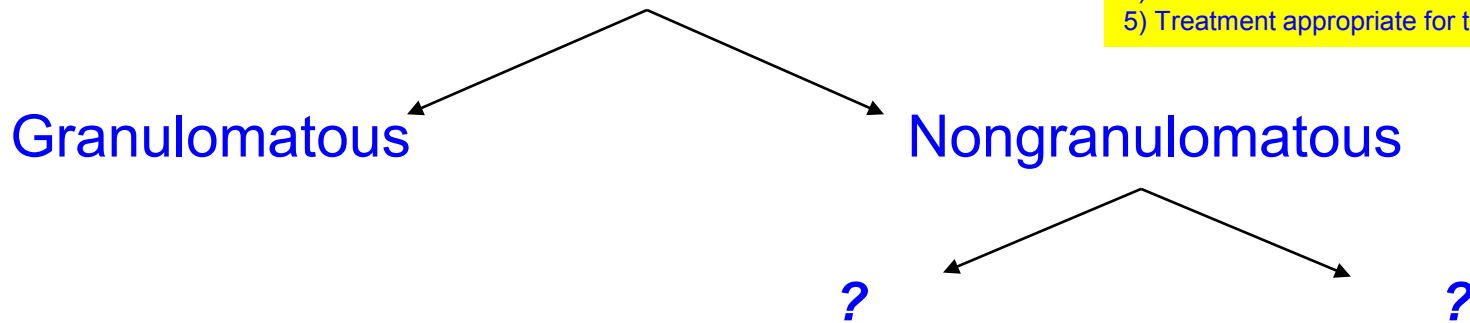
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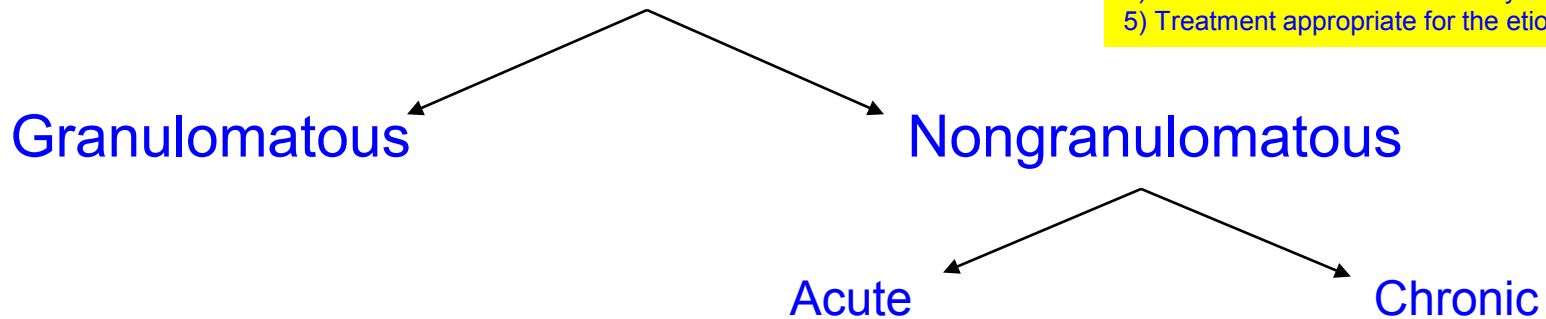


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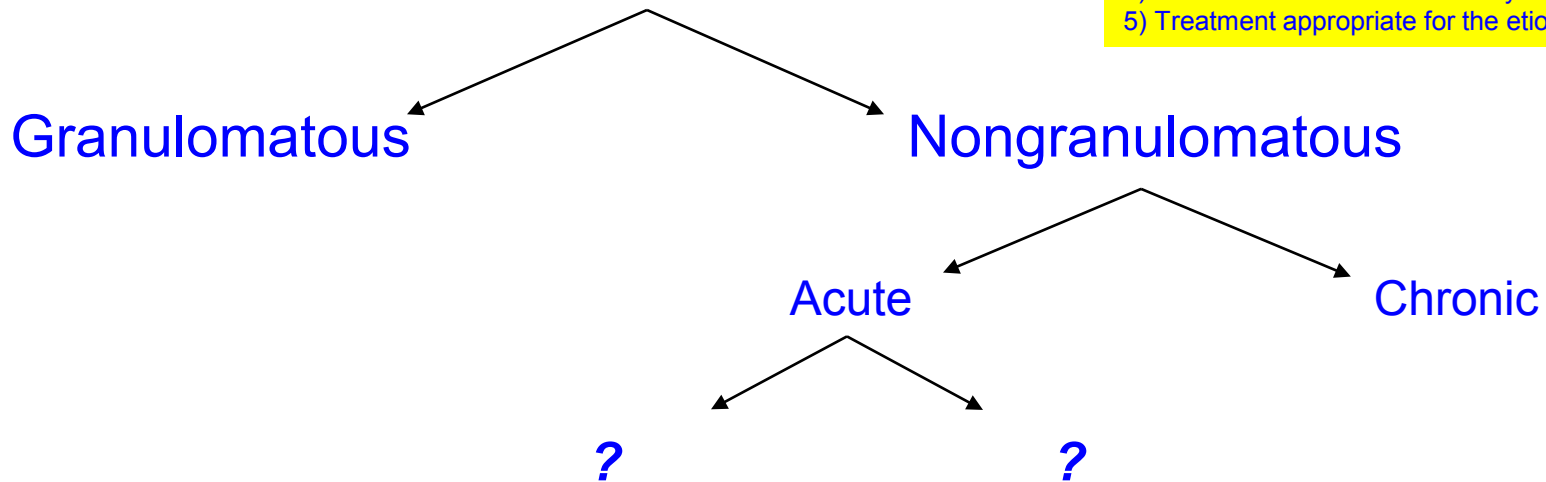


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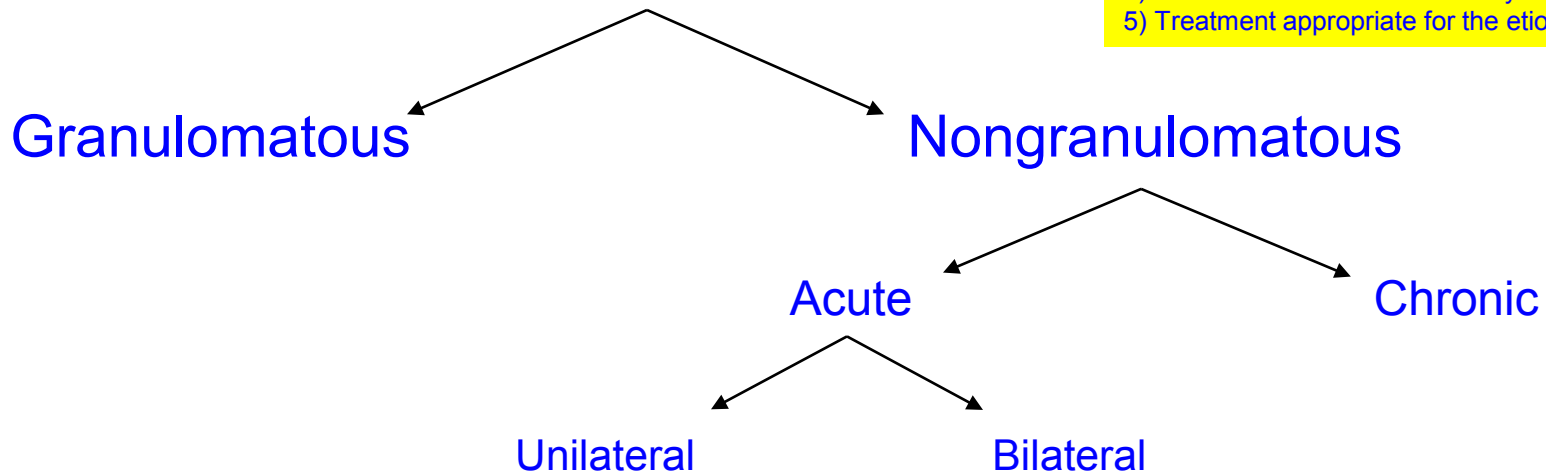


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Granulomatous

- ?
- Syphilis
- Sarcoid
- HSV
- VKH
- Toxoplasmosis
- Lyme

Nongranulomatous

Acute

Unilateral

- HLA-B27 dz
- Posner-Schlossman
- Sarcoid
- Syphilis
- HSV/VZV
- ?

Bilateral

- TINU
- Behçet
- Drug rxn
- Leptospirosis
- Sarcoid
- Syphilis
- IBD/PA
- ?

Chronic

- JIA
- FHI
- IBD/PA
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On the diagram above, where can TB present?

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- HSV
- VKH
- Toxoplasmosis
- Lyme

Nongranulomatous

Acute

Unilateral

- HLA-B27 dz
- Posner-Schlossman
- Sarcoid

Bilateral

- TINU
- Behçet
- Drug rxn
- Leptospirosis
- Sarcoid
- Syphilis
- IBD/PA
- TB

Chronic

- JIA
- FHI
- IBD/PA
- Sarcoid
- Syphilis
- TB

What descriptive term is often applied to the KP in TB?
'Mutton fat' (just as in sarcoid)

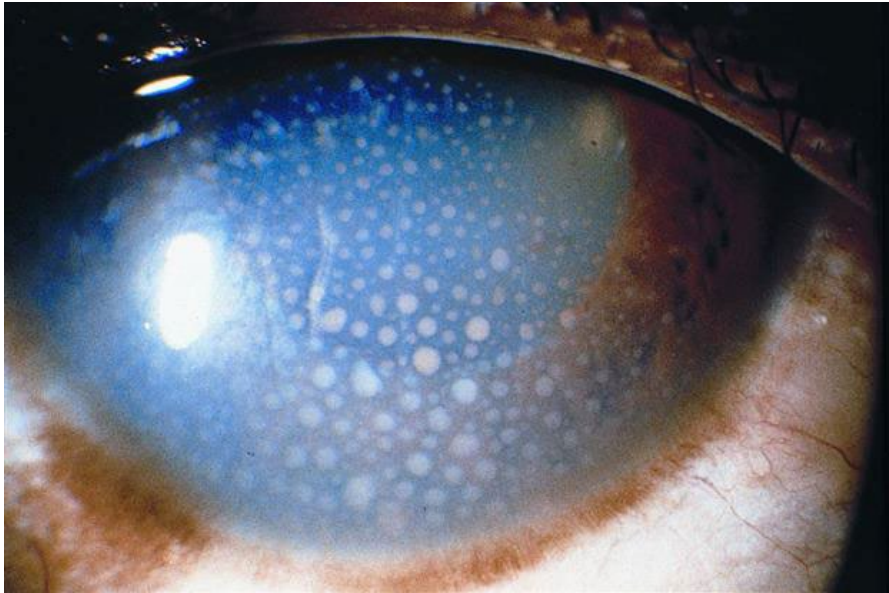
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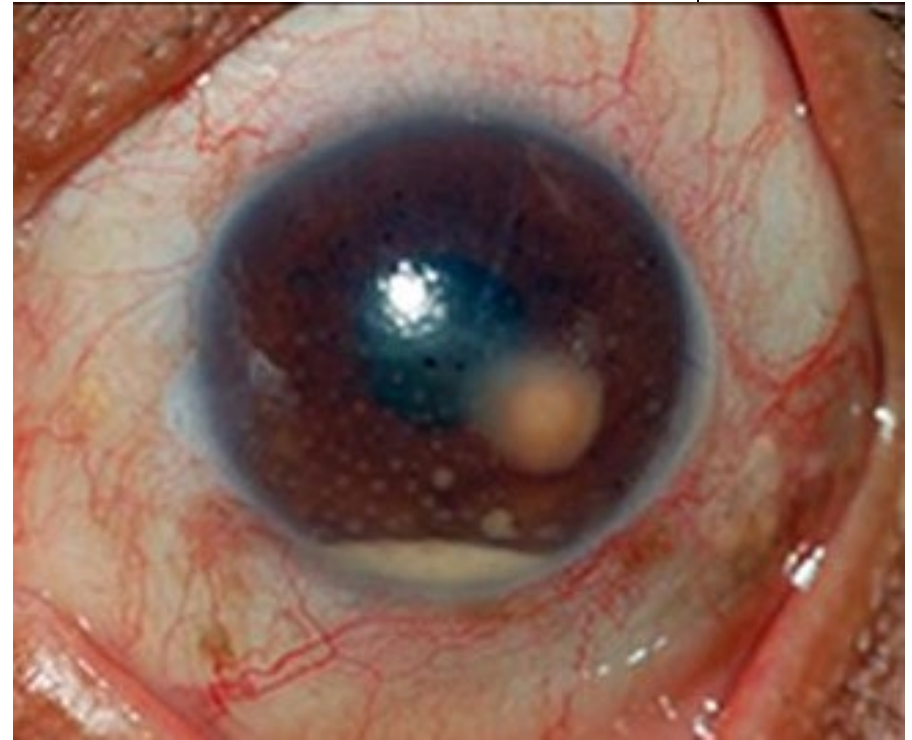
How likely is TB to present in this manner, ie, as an isolated anterior uveitis without posterior findings?

*Very **unlikely***

Uveitis: *TB*



Sarcoid: Mutton-fat KP



TB: Mutton-fat KP (note also the AC granuloma)

Uveitis: *Anterior*

- 1) The uveitis is profiled
- 2) The profiled case is meshed
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Granulomatous

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Nodules (just as in sarcoid)

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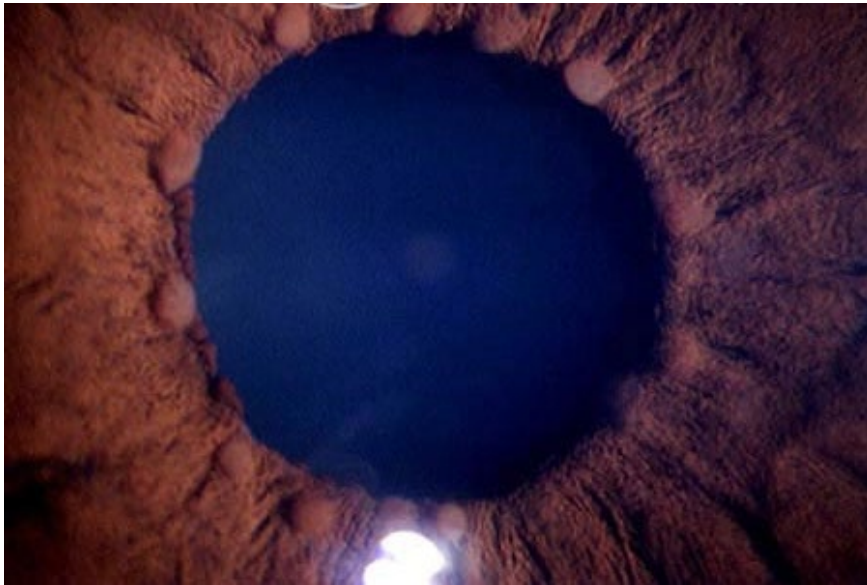
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Uveitis: *TB*



Sarcoid: Iris nodules

TB: Iris nodules

(I couldn't find any pics, but they should look like the sarcoid ones)

Uveitis: *Anterior*

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Are synechiae common?

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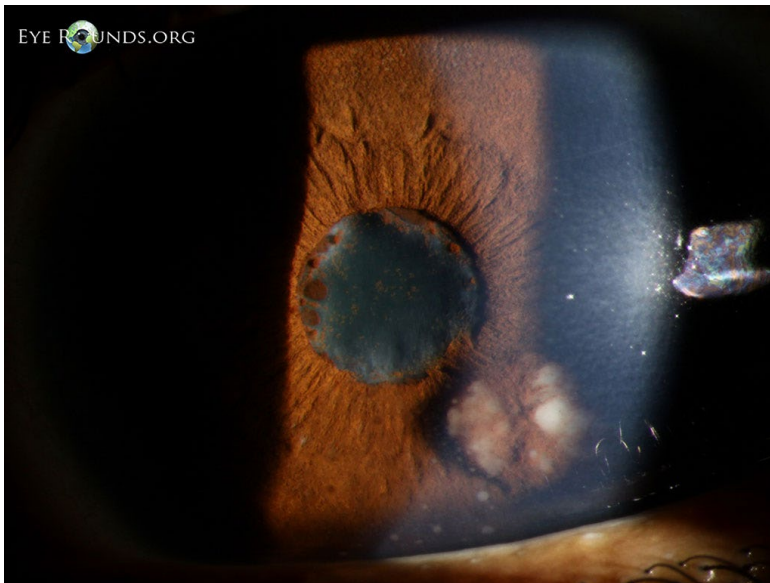
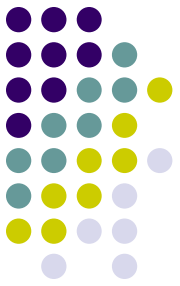
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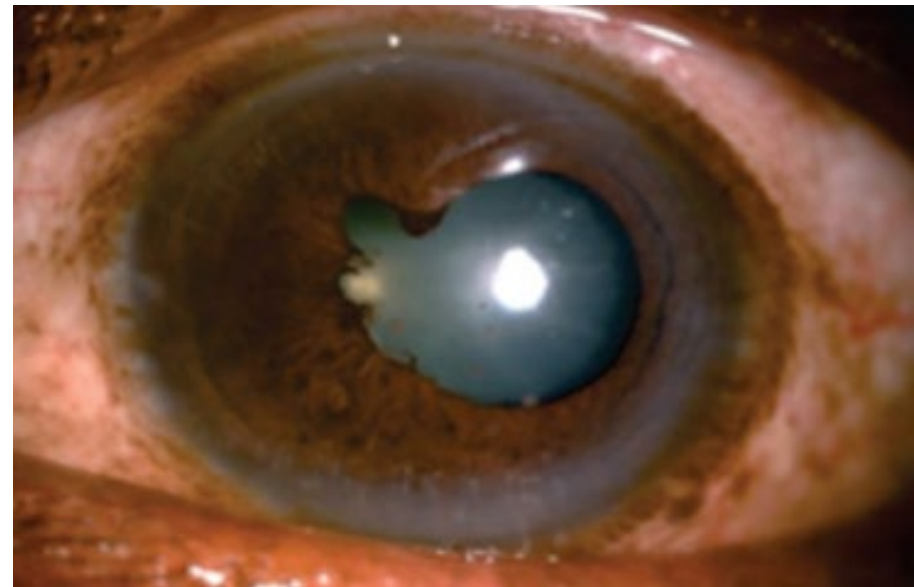
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Uveitis: *TB*



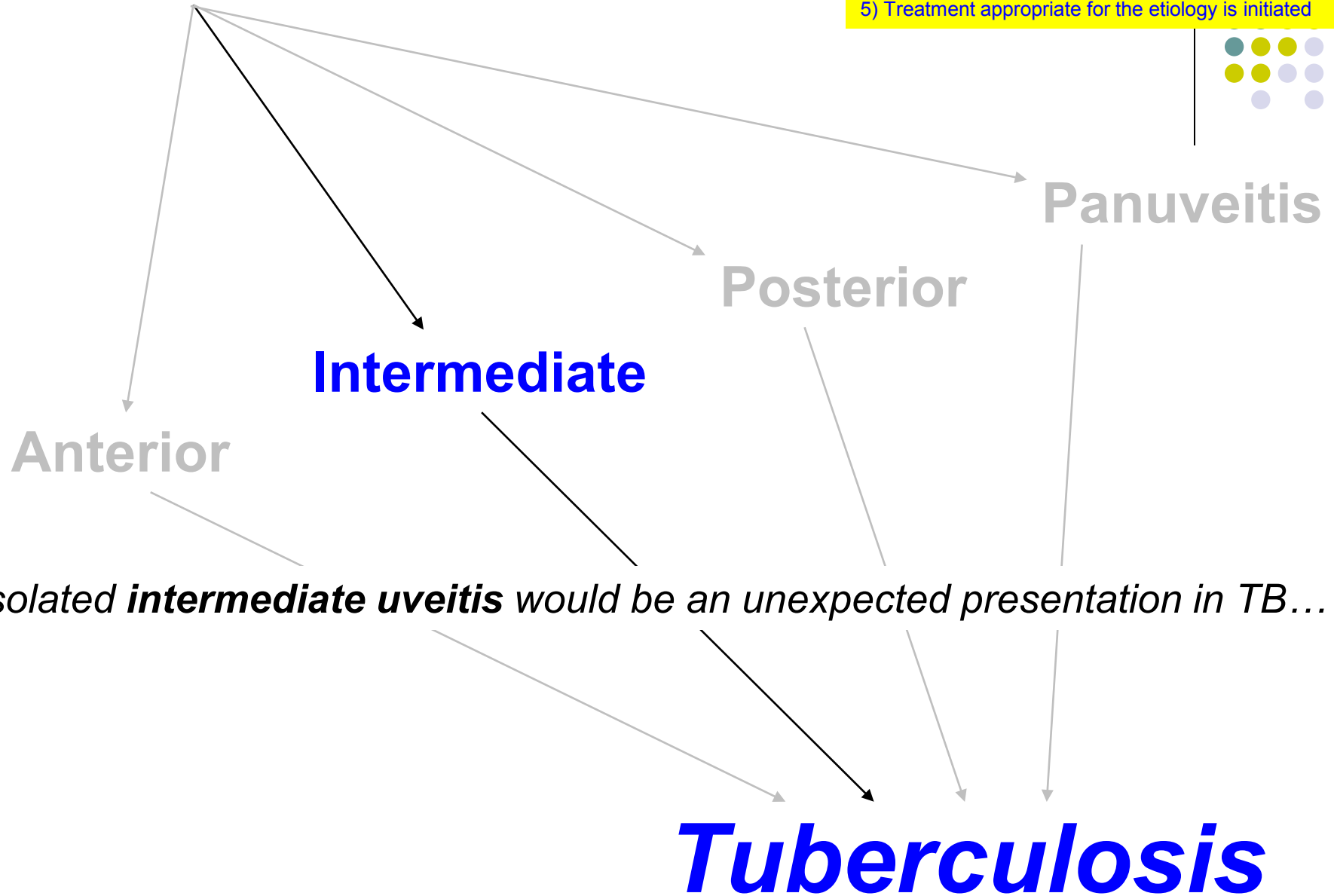
Sarcoid: Posterior synechiae
(and the world's largest
Busacca nodule)



TB: Posterior synechiae

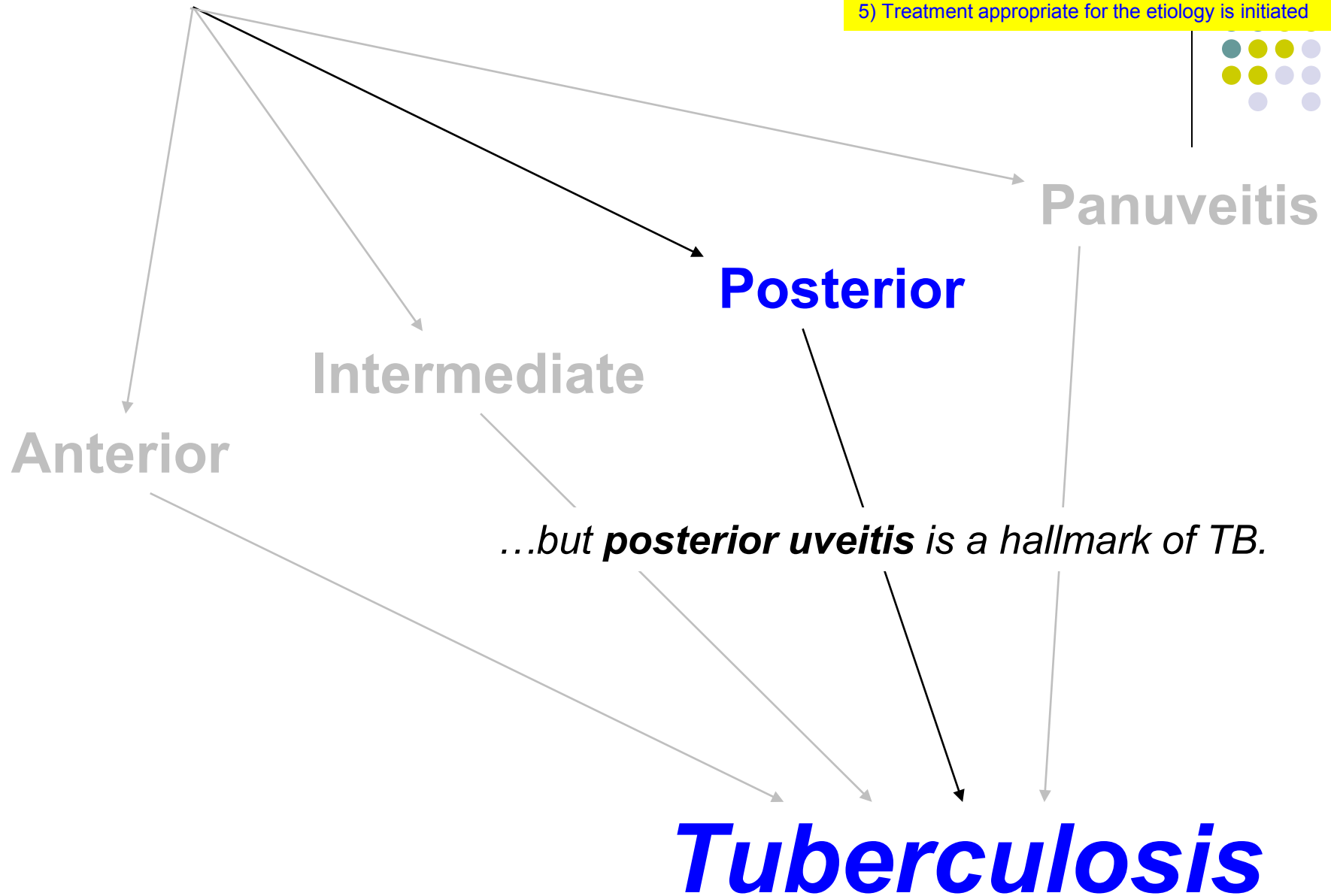
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Uveitis: *Posterior*

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Choroiditis

**Chorioretinitis or
Retinochoroiditis**

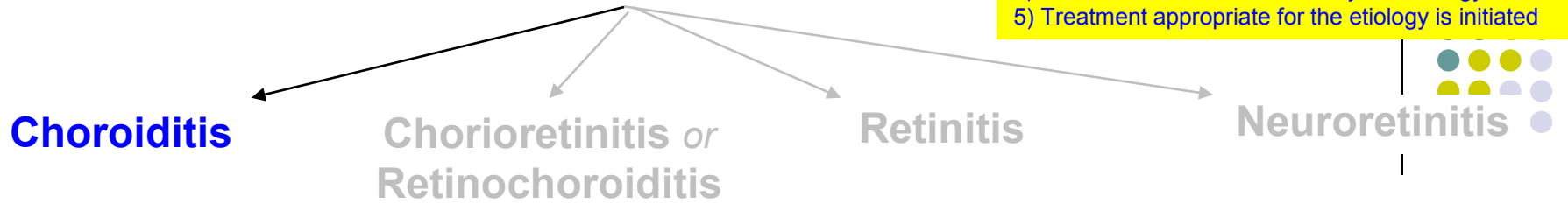
Retinitis

Neuroretinitis



What is the classic posterior manifestation of TB?

Uveitis: *Posterior*



What is the classic posterior manifestation of TB?

Choroiditis

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Why does TB have a special affinity for the choroid?

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Recall TB has an affinity for those areas of the body with especially high O₂ tension (eg, the lung apices).

Foreshadowing alert payoff!

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How does TB choroiditis present?

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Uveitis: *TB*



Choroidal tubercles

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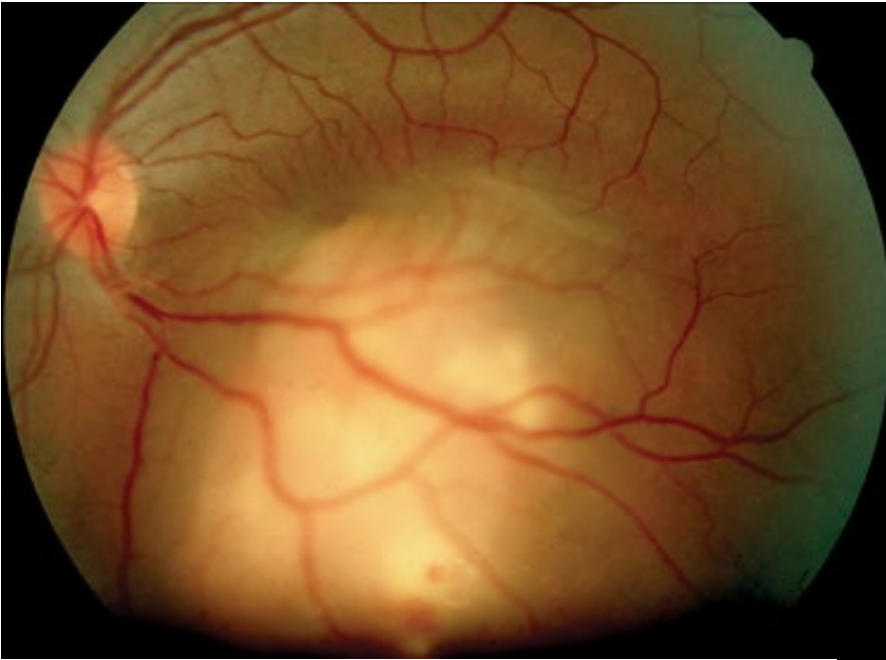
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Uveitis: *TB*



Large choroidal tubercles



TB choroiditis: Single large tubercle pre- and post-tx

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Do these tubercles tend to be found in the posterior pole, or more peripherally?

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The posterior pole

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Is the overlying retina affected?

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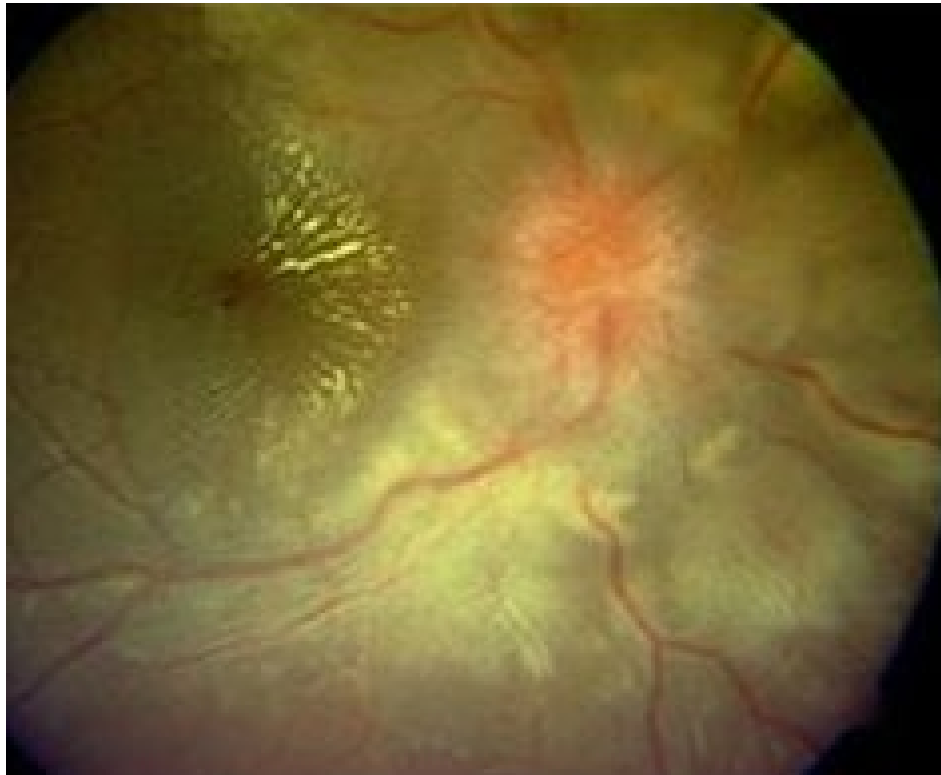
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The posterior pole

Is the overlying retina affected?

Yes; retinal hemorrhages, edema (sometimes in the form of a macular star), and/or serous RD can result.

Uveitis: *TB*



Macular star 2ndry to TB chorioretinitis

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Can the ONH be affected?

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Can the ONH be affected?

Yes; disc edema is a common occurrence

Uveitis: *TB*



Dis edema in TB

Uveitis: *Posterior*

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So, TB can present as a neuroretinitis

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There is another classic posterior manifestation that involves the retina. What is its eponymous name?

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There is another classic posterior manifestation that involves the retina. What is its eponymous name?
Eales disease

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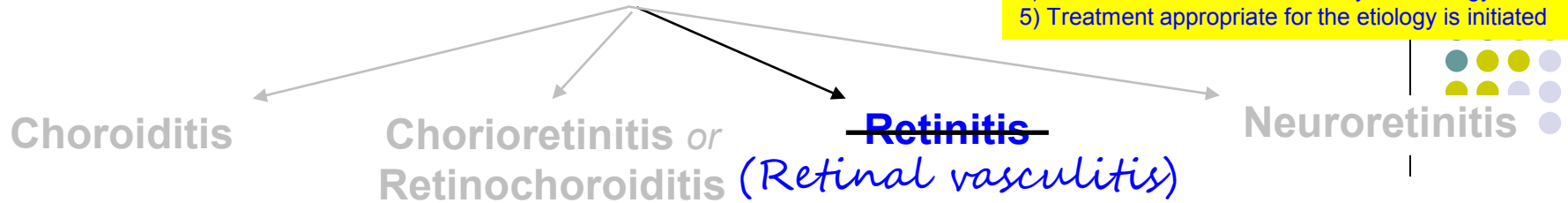


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What specific component of the retina is primarily affected in Eales dz?

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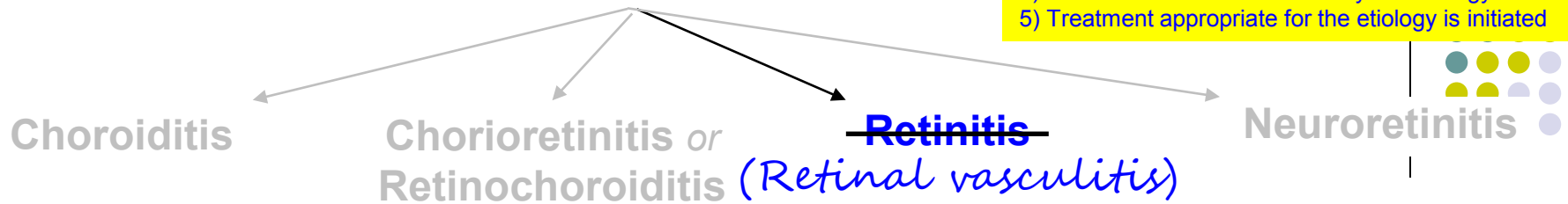


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The vasculature; ie, Eales is a retinal vasculitis

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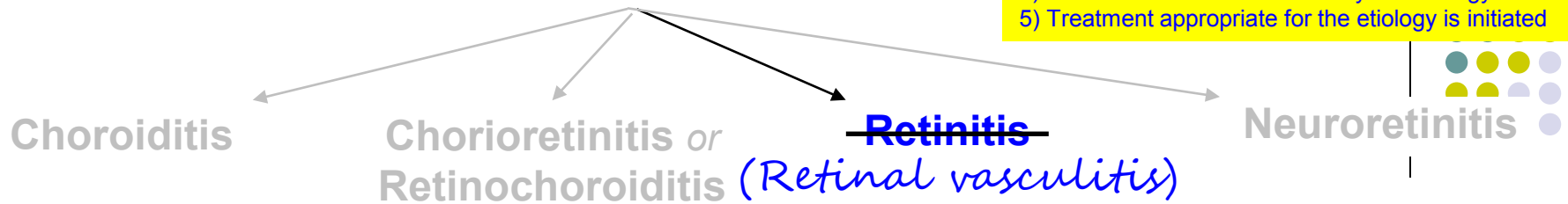
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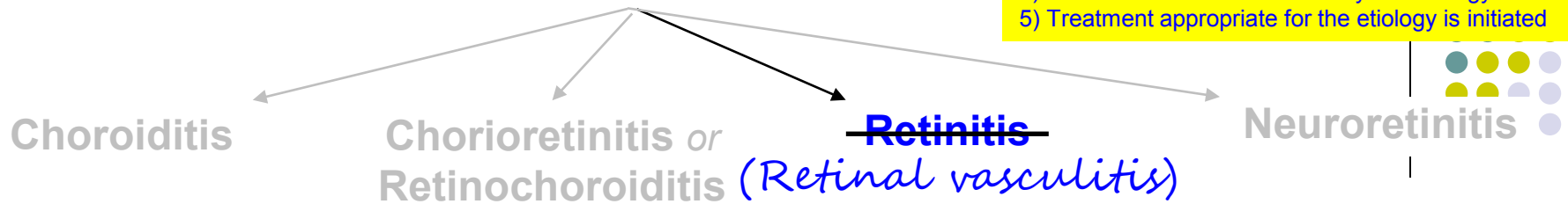
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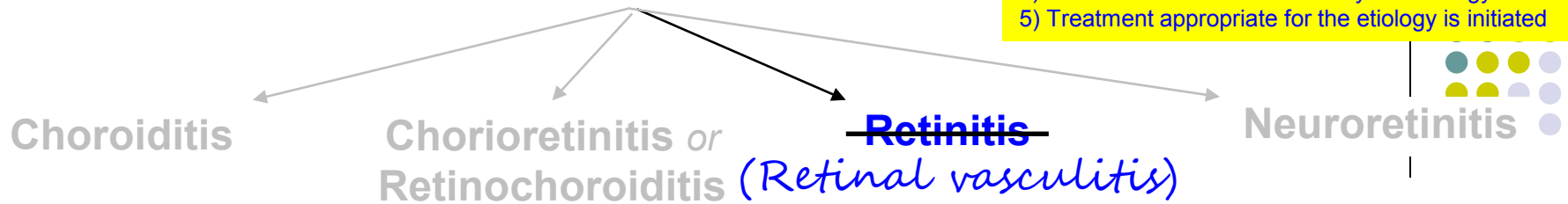
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Demographically speaking, who is the classic Eales pt?

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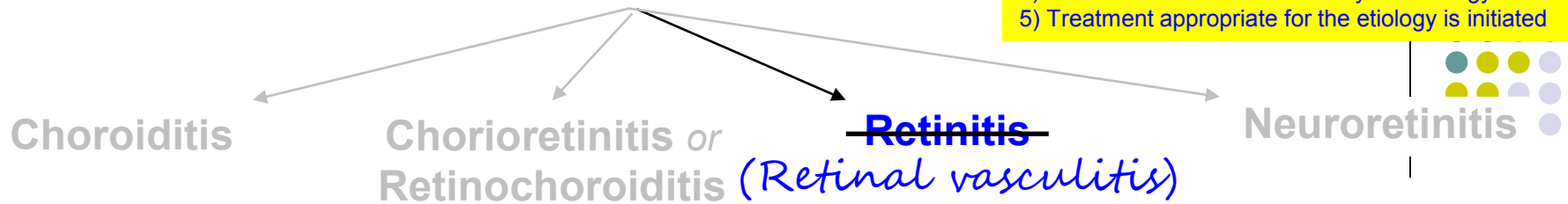
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Demographically speaking, who is the classic Eales pt?
A healthy young adult male from [] or the [Two Words]

Uveitis: *Posterior*

- 1) The uveitis is profiled
- 2) The profiled case is meshed
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There is another classic posterior manifestation that involves the retina. What is its eponymous name?
Eales disease

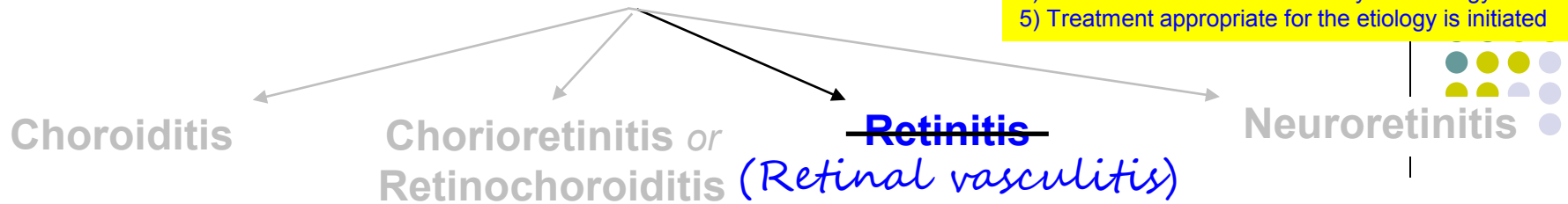
What specific component of the retina is primarily affected in Eales dz?
The vasculature; ie, Eales is a retinal vasculitis

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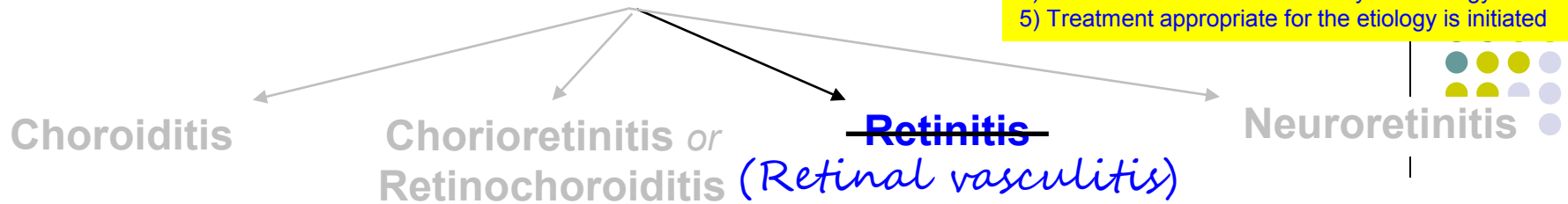
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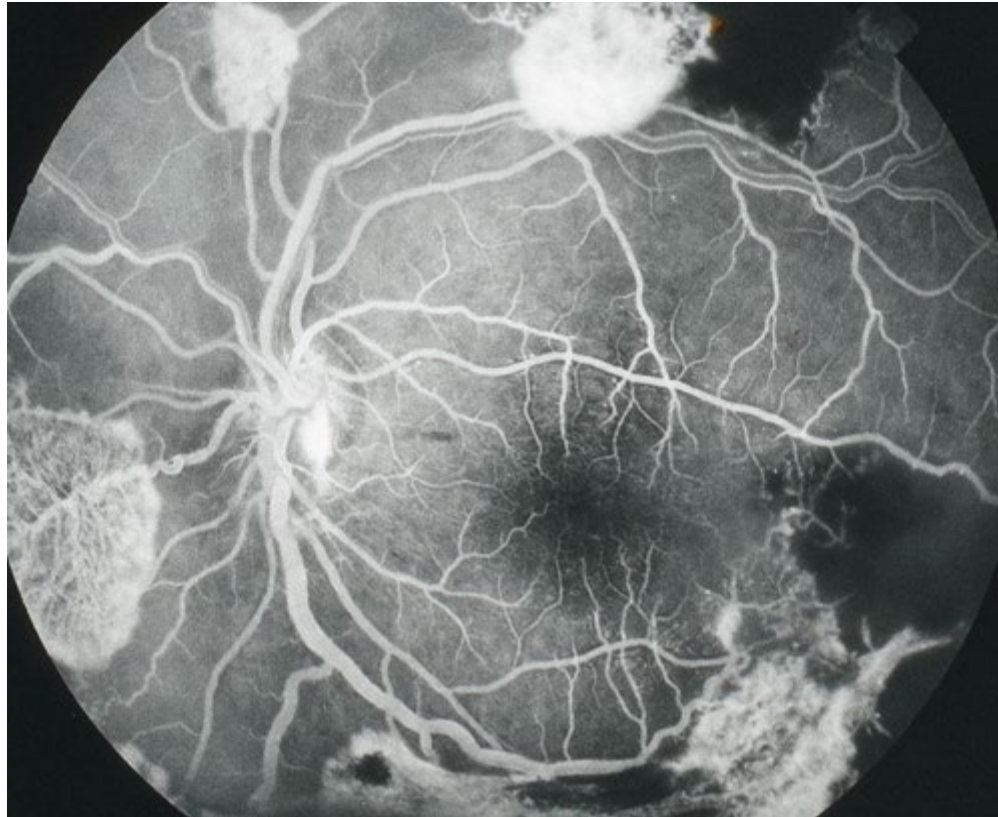
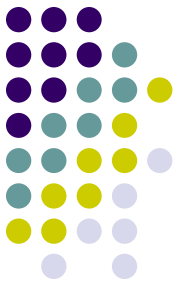
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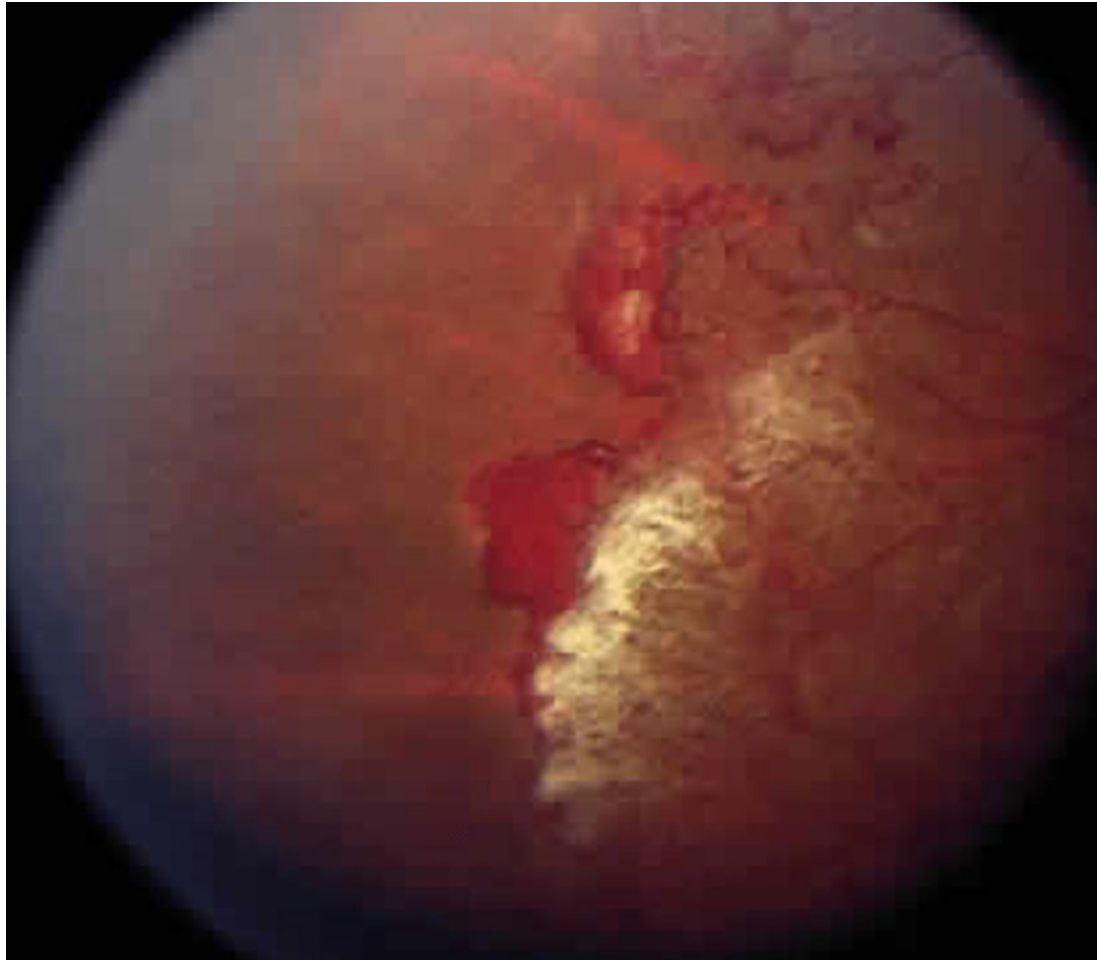
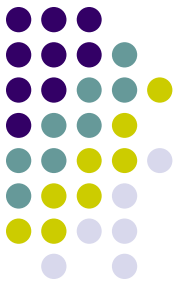
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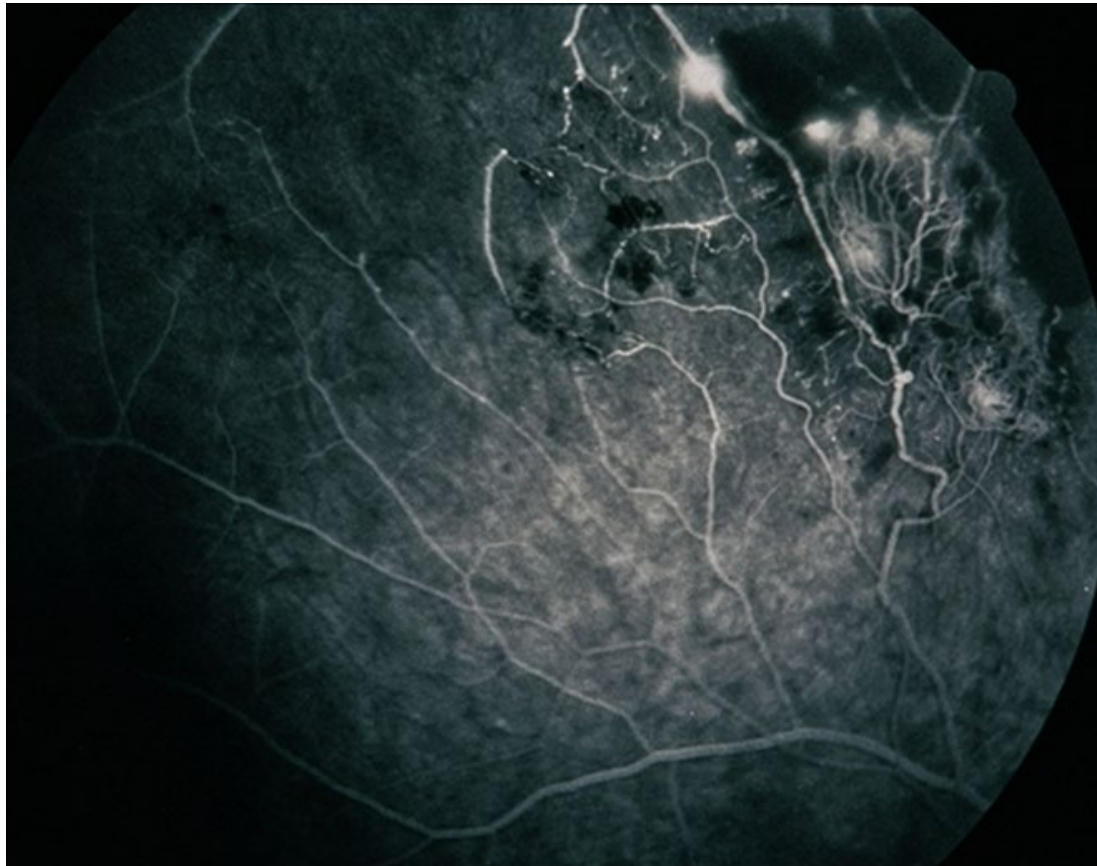
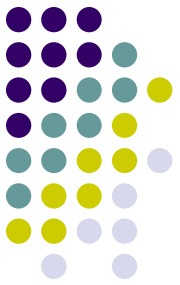
How does Eales dz present?
As a peripheral vascular occlusive disease with retinal hemorrhages. In time, retinal nonperfusion can lead to neovascularization and tractional RD



Eales disease: Peripheral neo



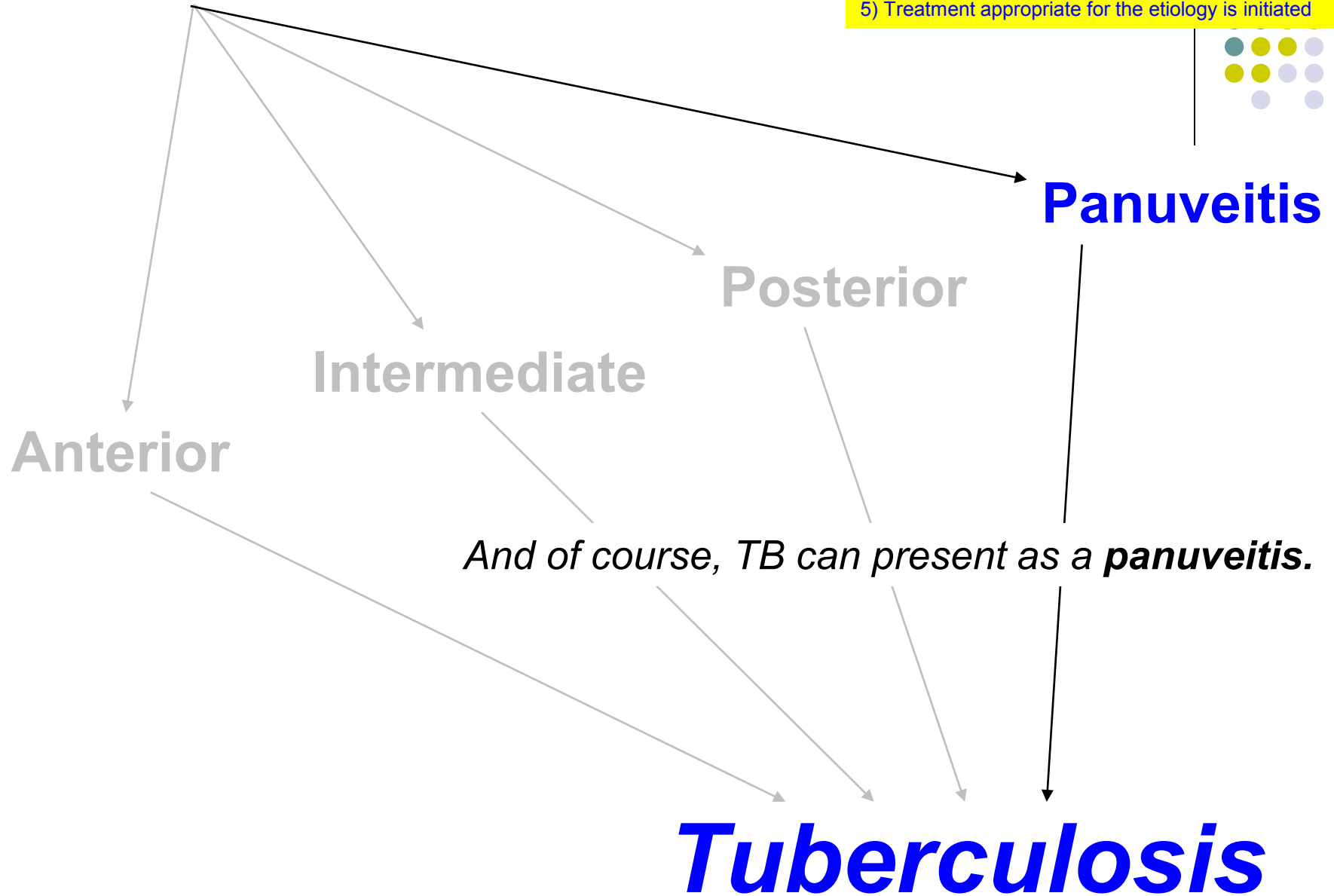
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Uveitis: **TB**

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Note that the characteristics that increase the risk of a false-negative PPD are the same as those that put someone at risk of having TB in the first place!

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--Advanced chest imaging

--PET scanning

--Marginal culture and staining of sputum, urine, and gastric samples

--Lymph node biopsy for microbiologic analysis

Under what circumstances should PPD testing be employed in a low-prevalence country like the US?

--Pts exposed to TB

--Pts infected with TB

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--Chest imaging

--PET scanning

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Under what circumstances should the clinician consider the following?

--Pts exposed to TB

--Pts infected with TB

If all of the above are negative, what should the uveitis-managing clinician do next?

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Under what circumstances should the uveitis-managing clinician consider aqueous, vitreous or even chorioretinal sampling for microbiologic analysis?

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What two overarching principles guide TB treatment?

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What two overarching principles guide TB treatment?

- Multidrug regimen is employed
- Directly-observed therapy (DOT) is utilized

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In a word, resistance. There is already widespread resistance to isoniazid (INH); in some locales, TB is resistant to several agents. Multidrug regimens reduce the risk of development of further resistance.

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Uveitis: *TB*

Treatment

What two overarching principles guide TB treatment?

- Multidrug regimen is employed
- Directly-observed therapy (DOT) is utilized

Why is it important to employ multiple anti-TB agents simultaneously?

In a word, resistance. There is already widespread resistance to isoniazid (INH); in some locales, TB is resistant to several agents. Multidrug regimens reduce the risk of development of further resistance.

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