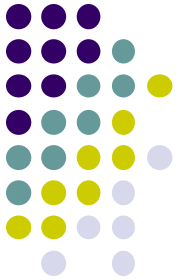
Unilateral ↑ IOP associated with:



--Intraocular inflammation

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

We are going to look at **unilateral elevated IOP** *in each of these clinical scenarios*

Unilateral ↑ IOP associated with:

--Intraocular inflammation

Generally speaking, do you expect an inflamed eye to be ***hyper****tensive, or* ***hypo****tensive?*

--Corr

--Incre

--Secondary glaucoma

Unilateral ↑ IOP associated with:

--Intraocular inflammation

Generally speaking, do you expect an inflamed eye to be **hyper***tensive, or* **hypo***tensive?*
Hypotensive

--Corr

--Incre

--Secondary glaucoma

Unilateral ↑ IOP associated with:

--Intraocular inflammation

Generally speaking, do you expect an inflamed eye to be ***hyper****tensive, or* ***hypo****tensive?*
Hypotensive

Why hypotensive?

--Corn

--Incre

--Secondary glaucoma

Unilateral ↑ IOP associated with:

--Intraocular inflammation

Generally speaking, do you expect an inflamed eye to be **hyper***tensive, or* **hypo***tensive?*
Hypotensive

Why hypotensive?
Ciliary-body inflammation leads to decreased aqueous production, with subsequent low IOP.

--Corr

--Incre

--Secondary glaucoma

Unilateral ↑ IOP associated with:

--Intraocular inflammation

Generally speaking, do you expect an inflamed eye to be **hyper***tensive, or* **hypo***tensive?*
Hypotensive

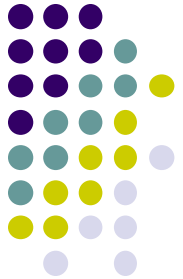
Why hypotensive?
Ciliary-body inflammation leads to decreased aqueous production, with subsequent low IOP. That said, certain uveitic entities are notorious for *elevated* IOP, thus rendering it an important clue re the etiology of the inflammation.

--Corr

--Incre

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

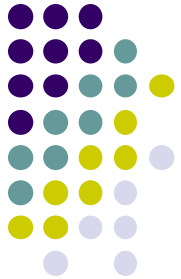
- A very general condition
- A somewhat specific condition
- A specific eponymous condition
- Another specific eponymous condition

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

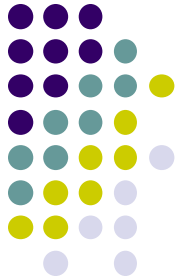
- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

- **--Anterior uveitis**
- **--Trabeculitis**
- --Fuchs heterochrom
- --Posner-Schlossma

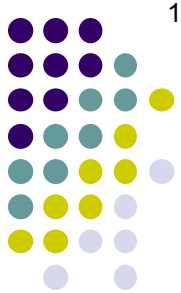
--Corneal endothelial abnormal

Both of these present with unilateral AC cell and ↑ IOP. How does one differentiate between them?

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

- **--Anterior uveitis**
- **--Trabeculitis**
- --Fuchs heterochrom
- --Posner-Schlossma

--Corneal endothelial abnormal

--Increased episcleral venous pressure

--Secondary glaucoma

Both of these present with unilateral AC cell and ↑ IOP. How does one differentiate between them?
The severity of the AC reaction is an important clue. In order for a 'simple' anterior uveitis to cause ↑ IOP, the inflammatory reaction must be quite severe.

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- **--Anterior uveitis**
- **--Trabeculitis**
- --Fuchs heterochrom
- --Posner-Schlossman

--Corneal endothelial abnormal

--Increased episcleral venous pressure

--Secondary glaucoma

Both of these present with unilateral AC cell and ↑ IOP. How does one differentiate between them?
The severity of the AC reaction is an important clue. In order for a 'simple' anterior uveitis to cause ↑ IOP, the inflammatory reaction must be quite severe.
In contrast, the cell associated with trabeculitis can be quite mild.

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

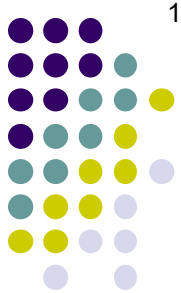
What etiology should come to mind with this?

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

What etiology should come to mind with this?
Herpesvirus infection, especially HSV and VZV

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?

1)
2)
3)
4)

(hints soon forthcoming…)

--Intraocular inflammation

- **--Anterior uveitis**
  - --Trabeculitis
  - --Fuchs heterochromic iridocyclitis
  - --Posner-Schlossman

(Etiologies **other** than these two, that is)

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) *this one is a* **family** *of infectious agents*
2)
3)
4)

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2)
3)
4)

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) *this one is a specific bug*
3)
4)

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) Toxoplasmosis
3)
4)

--Intraocular inflammation
- **--Anterior uveitis**
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- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) Toxoplasmosis
3) *this one is a common noninfectious entity*
4)

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

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Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) Toxoplasmosis
3) Sarcoidosis
4)

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
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--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) Toxoplasmosis
3) Sarcoidosis
4) *this one is another specific bug*

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

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Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?
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2) Toxoplasmosis
3) Sarcoidosis
4) Syphilis

--Intraocular inflammation
- **--Anterior uveitis**
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--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:

What four anterior uveitis etiologies are notorious for elevating IOP?

1) Herpesvirus (all forms)
2) Toxoplasmosis
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4) Syphilis

Which of these can present with granulomatous-appearing KP?

--Intraocular inflammation
- **--Anterior uveitis**
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

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1) Herpesvirus (all forms)
2) Toxoplasmosis
3) Sarcoidosis
4) Syphilis

Which of these can present with granulomatous-appearing KP?
All of them

--Intraocular inflammation
- **--Anterior uveitis**
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- --Fuchs heterochromic iridocyclitis
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What four anterior uveitis etiologies are notorious for elevating IOP?

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3) Sarcoidosis
4) Syphilis

Which can present with **stellate** *KP?*

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- **--Anterior uveitis**
- **--Trabeculitis**
- **--Fuchs heterochromic iridocyclitis**
- --Posner-Schlossman

--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

What four anterior uveitis etiologies are notorious for elevating IOP?

1) **Herpesvirus (all forms)**
2) **Toxoplasmosis**
3) **Syphilis**
4) **Sarcoidosis**

Which can present with **stellate** *KP?*

All but sarcoid (and don't forget about FHI)

FHI causes stellate KP too

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

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--Increased episcleral venous pressure

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What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--

--

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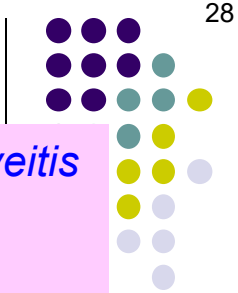
Unilateral ↑ IOP associated with:



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--Corneal endothelial abnormality

--Increased episcleral venous pressure

--Secondary glaucoma

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--Topical steroids
--Cycloplegia
--Anti-infectives if bug is known
-- +/- ocular hypotensives

Unilateral ↑ IOP associated with:

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What two classes of topical hypotensives should probably be avoided?

--
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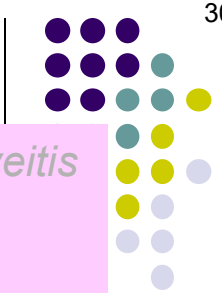

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--Prostaglandin analogues

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Why should these be avoided?

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--Topical steroids
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--Anti-infectives if bug is known
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What two classes of topical hypotensives should probably be avoided?
--Miotics
--Prostaglandin analogues

Why should these be avoided?
Both are potentially inflammogenic

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochrom

--Posner-Schlossmar

-- Corneal endothelial abnormality

--Increased episcleral venous pressur

--Secondary glaucoma

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--**Topical steroids**

--Cyc

--Anti-

-- +/-

In what way might steroid therapy complicate the IOP issue?

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis
--Trabeculitis
--Fuchs heterochrom
--Posner-Schlossmar

-- Corneal endothelial abnormality

--Increased episcleral venous pressur

--Secondary glaucoma

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--**Topical steroids**

--Cyc
--Anti-
-- +/-

In what way might steroid therapy complicate the IOP issue?

Recall that some pts are **steroid responders**, meaning their IOP increases secondary to steroid therapy. Thus, when a uveitis pt (under treatment) develops increased IOP, it could mean either:

a)

b)

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochrom
- --Posner-Schlossmar

-- Corneal endothelial abnormality

--Increased episcleral venous pressur

--Secondary glaucoma

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-- +/-

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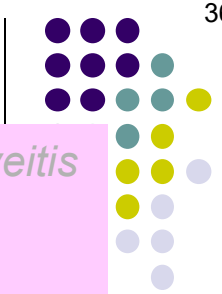
Recall that some pts are **steroid responders**, meaning their IOP increases secondary to steroid therapy. Thus, when a uveitis pt (under treatment) develops increased IOP, it could mean either:

a) their uveitis is not well controlled, and therefore the steroid should be **increased**; *or*

b)

Unilateral ↑ IOP associated with:



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--Anti-

-- +/-

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a) their uveitis is not well controlled, and therefore the steroid should be **increased**; *or*

b) they are a steroid responder, and their steroid should be **decreased** (or even stopped)

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis
--Trabeculitis
--Fuchs heterochrom
--Posner-Schlossmar

-- Corneal endothelial abnormality

--Increased episcleral venous pressur

--Secc

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--**Topical steroids**

--Cyc
--Anti-
-- +/-

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Recall that some pts are **steroid responders**, meaning their IOP increases secondary to steroid therapy. Thus, when a uveitis pt (under treatment) develops increased IOP, it could mean either:
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So how do you know whether steroids are the solution to, or the cause of, ocular hypertension in uveitis?

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochrom
- --Posner-Schlossmar

-- Corneal endothelial abnormality

--Increased episcleral venous pressur

--Secc

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

--**Topical steroids**

--Cyc

--Anti-

-- +/-

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Recall that some pts are **steroid responders**, meaning their IOP increases secondary to steroid therapy. Thus, when a uveitis pt (under treatment) develops increased IOP, it could mean either:

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So how do you know whether steroids are the solution to, or the cause of, ocular hypertension in uveitis?

As a rule, it takes at least 2 weeks before steroid-induced ocular hypertension occurs. Thus, elevated IOP within this time frame indicates inadequate uveitis control, and the steroid dose should be increased.

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- --Anterior uveitis
- --Trabeculitis
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--Secc

What is the usual treatment regimen for anterior uveitis accompanied by increased IOP?

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--Anti-

-- +/-

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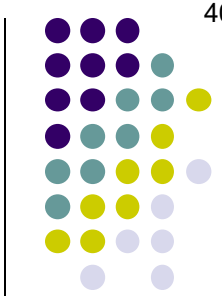
So how do you know whether steroids are the solution to, or the cause of, ocular hypertension in uveitis?

As a rule, it takes at least 2 weeks before steroid-induced ocular hypertension occurs. Thus, elevated IOP within this time frame indicates inadequate uveitis control, and the steroid dose should be increased.

On the other hand, if IOP spikes ***after*** the uveitis is controlled, consideration should be given to tapering the steroid and/or adding an aqueous suppressant to the treatment regimen.

Unilateral ↑ IOP associated with:



--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

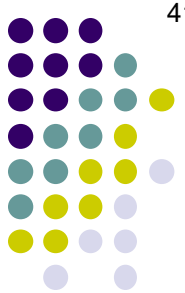
--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

--Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)

Unilateral ↑ IOP associated with:



--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

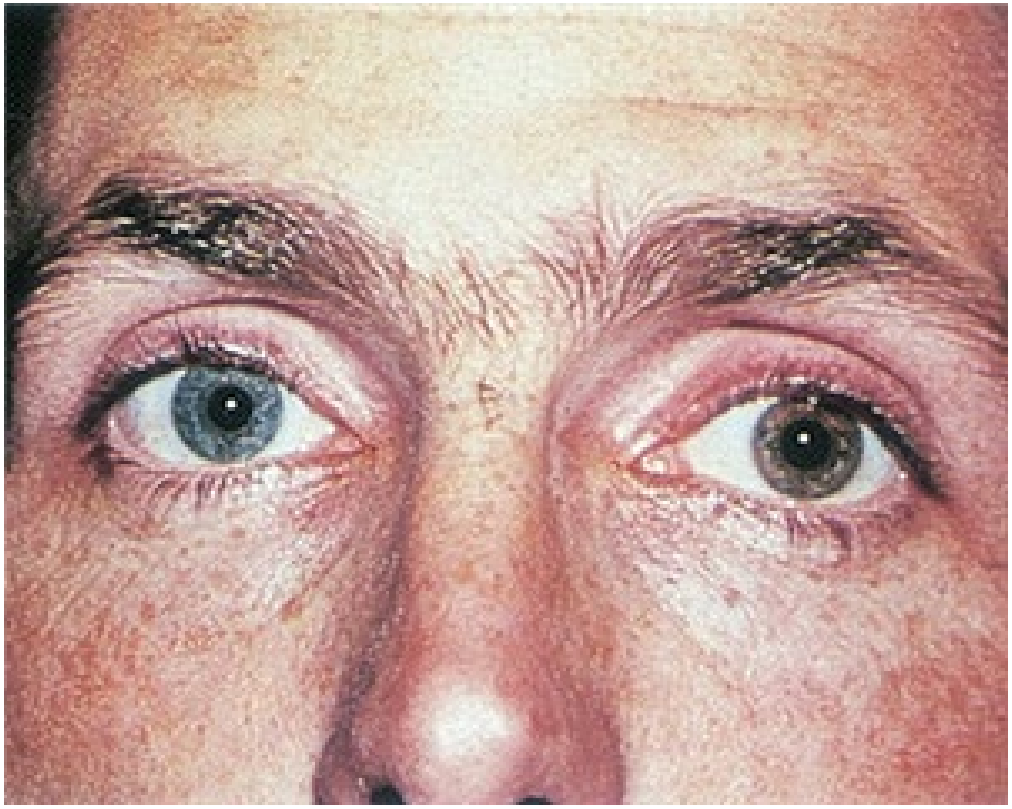
--Posner-Schlossman

--Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)

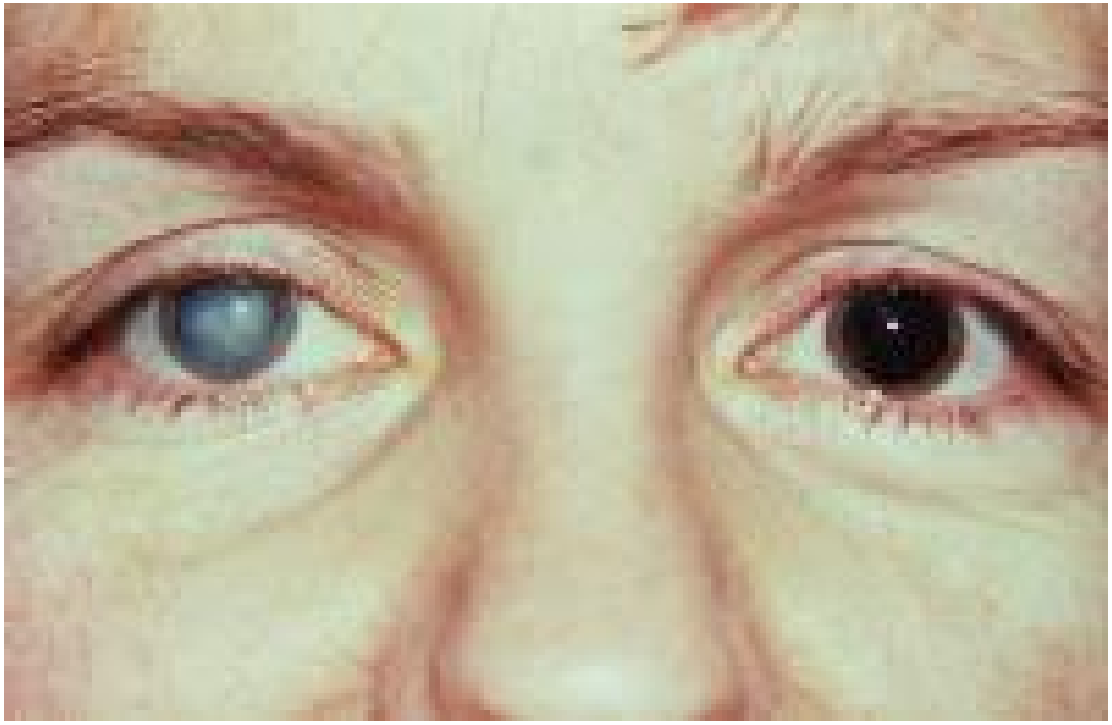
Heterochromia iridis, cataract, and stellate KP

Unilateral ↑ IOP associated with:



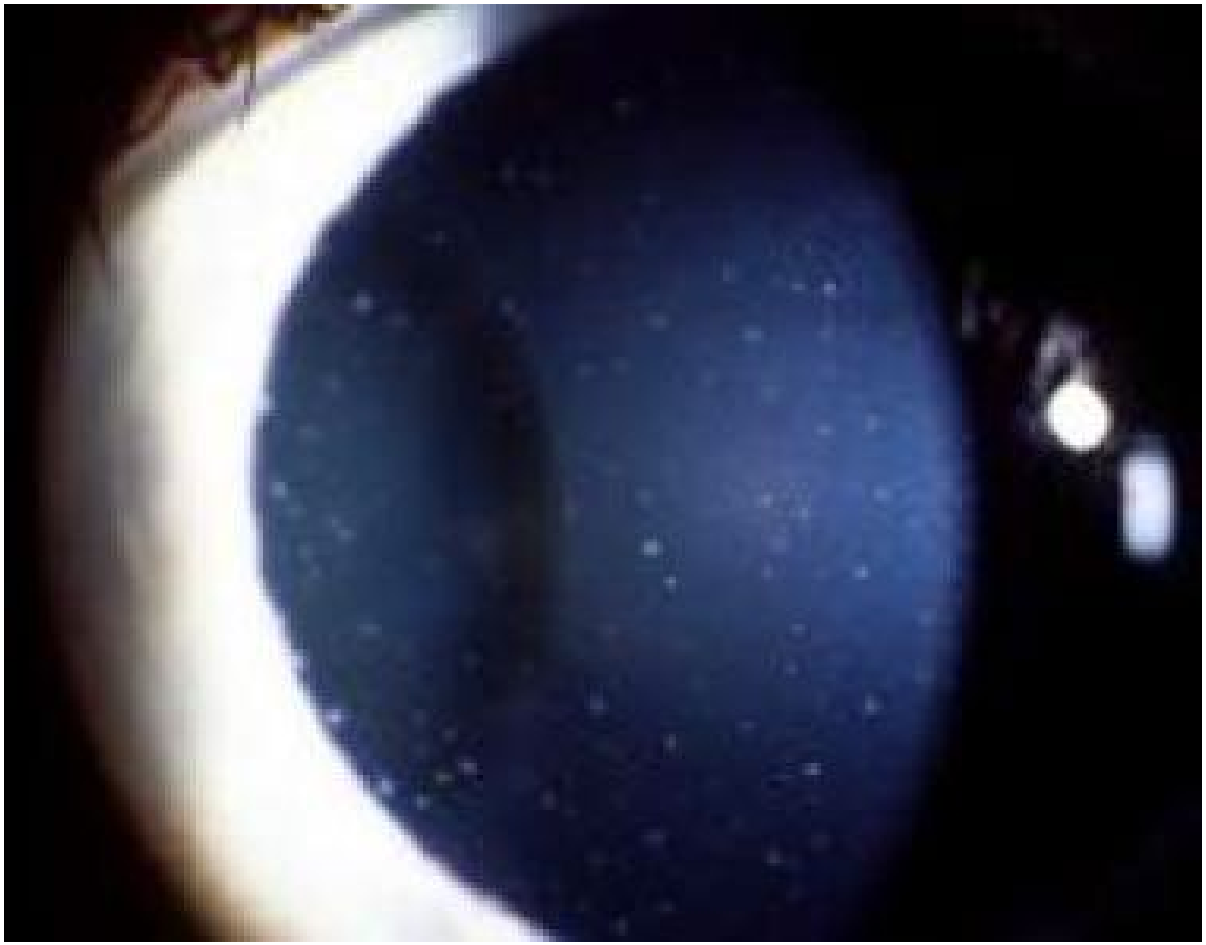
FHI: Heterochromia

Unilateral ↑ IOP associated with:



FHI: Note the cataract

Unilateral ↑ IOP associated with:



FHI: Stellate KP

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

--Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)

Heterochromia iridis, cataract, and stellate KP

*Is the affected eye the **darker** eye or the **lighter** eye?*

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

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Heterochromia iridis, cataract, and stellate KP

*Is the affected eye the **darker** eye or the **lighter** eye?*

The lighter (with one exception)

Unilateral ↑ IOP associated with:

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Heterochromia iridis, cataract, and stellate KP

*Is the affected eye the **darker** eye or the **lighter** eye?*

The lighter (with one exception)

What is the exception; ie, under what circumstances is the darker eye the one with FHI?

In individuals with light-blue eyes…

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis
--Trabeculitis
--Fuchs heterochromic iridocyclitis
--Posner-Schlossman

--Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)
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*Is the affected eye the **darker** eye or the **lighter** eye?*
The lighter (with one exception)

What is the exception; ie, under what circumstances is the darker eye the one with FHI?
In individuals with light-blue eyes…the iris atrophy stemming from the FHI process will make visible the **darkly-pigmented epithelium of the posterior iris, thus making the eye appear darker**

Unilateral ↑ IOP associated with:

--Intraocular inflammation

- --Anterior uveitis
- --Trabeculitis
- **--Fuchs heterochromic iridocyclitis**
- --Posner-Schlossman

-- Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)
Heterochromia iridis, cataract, and stellate KP

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In addition to heterochromia, the atrophic changes give the iris an appearance that has been likened to damage caused by an insect. What is the two-word description for this appearance?

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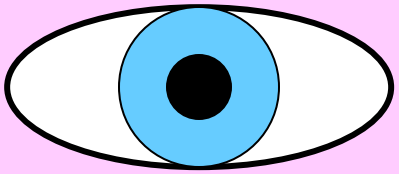

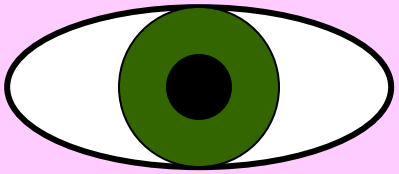

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In addition to heterochromia, the atrophic changes give the iris an appearance that has been likened to damage caused by an insect. What is the two-word description for this appearance?
'Moth eaten'

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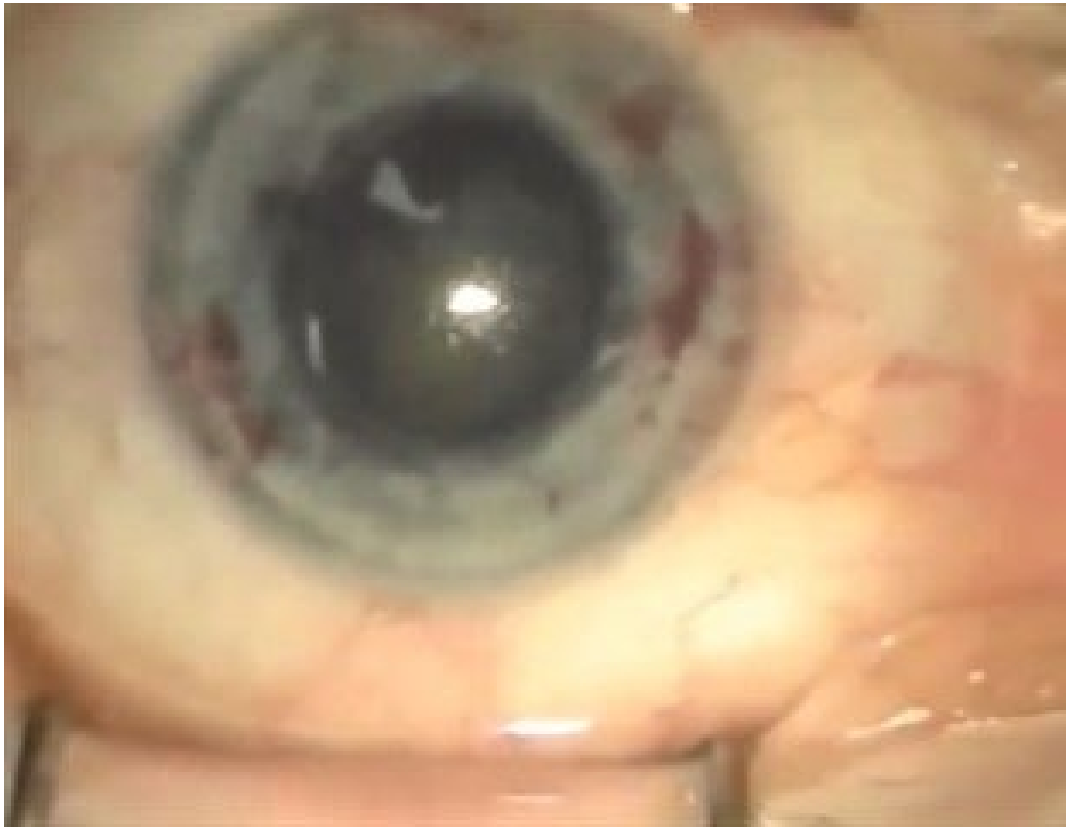

FHI: ‘Moth eaten’ iris. Note the smooth stromal architecture and loss of iris crypts

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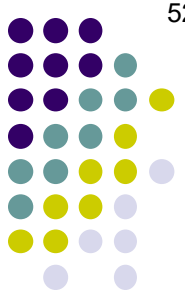

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The KP in FHI have a couple of other notable characteristics—what are they?

--

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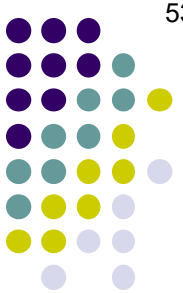

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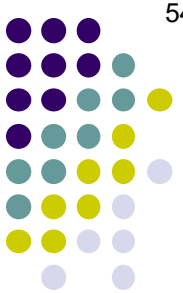

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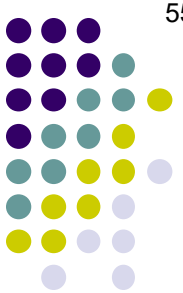

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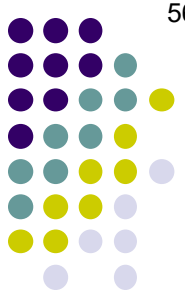

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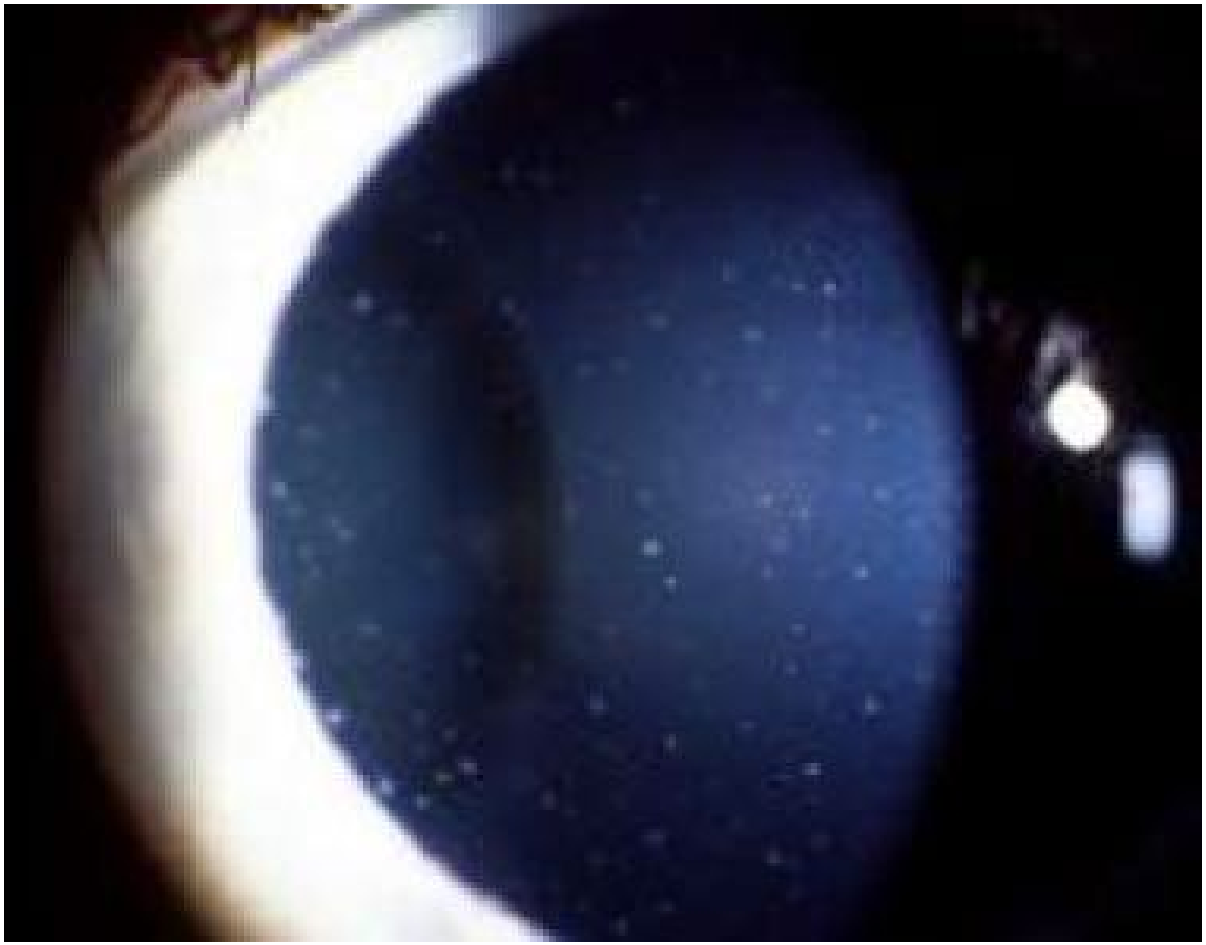

FHI: Stellate KP. **Note the diffuse distribution**

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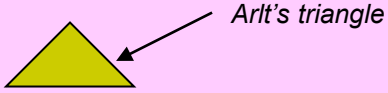
Where/what is Arlt's triangle*?*



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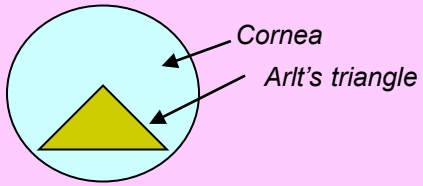
Where/what is Arlt's triangle*?*
It's an equilateral triangle with its apex at the corneal center and base near the inferior border of the cornea



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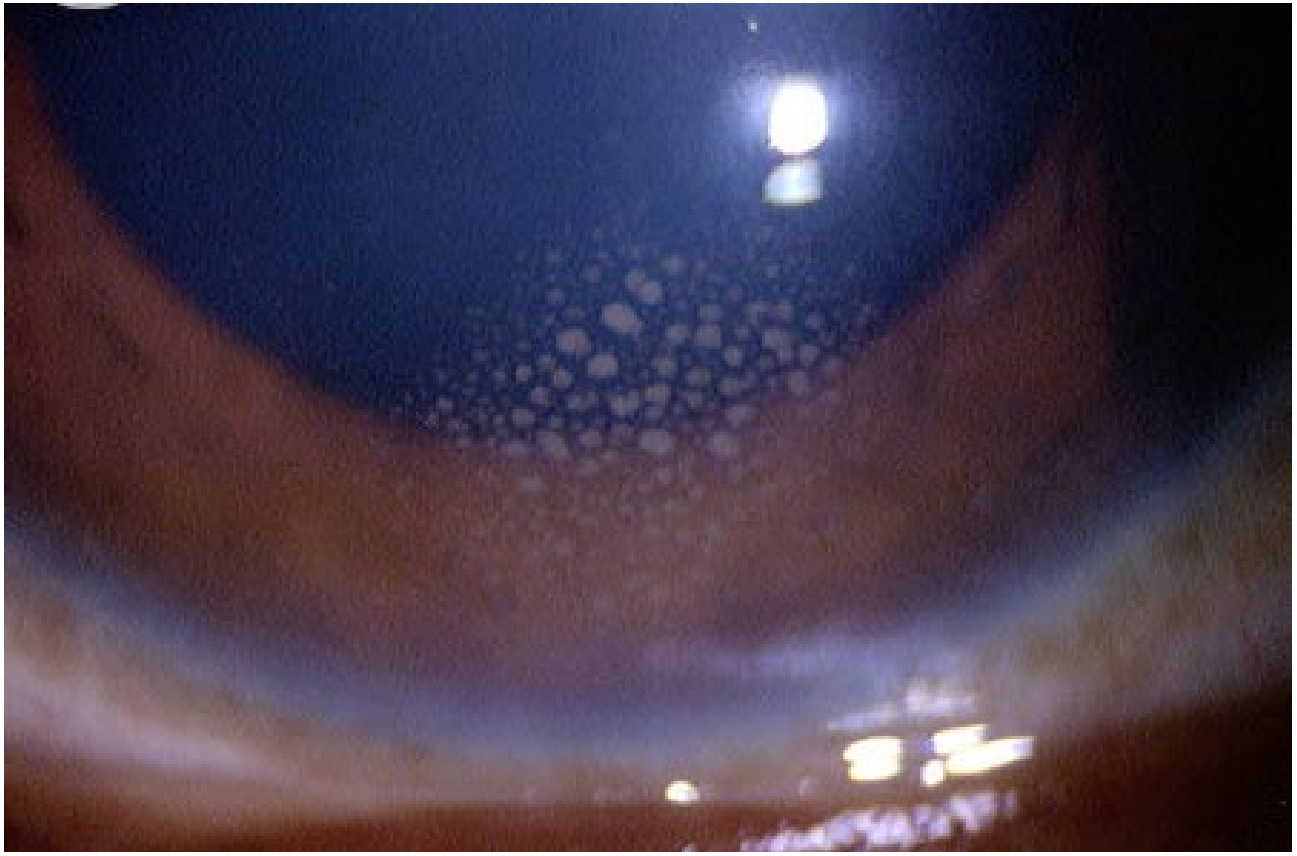

KP (in sarcoidosis) concentrated in Arlt's triangle

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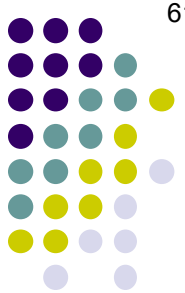

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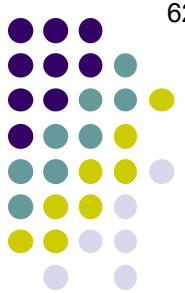

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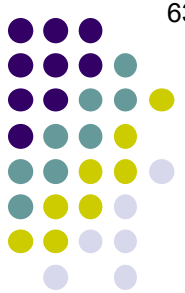

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Is the angle in FHI glaucoma open, or is it closed?

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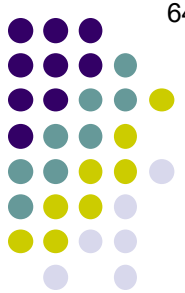

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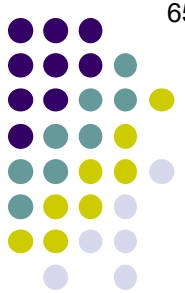

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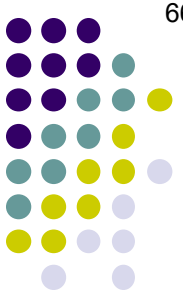

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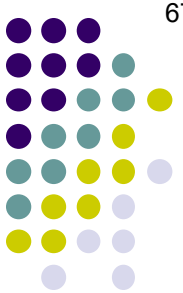

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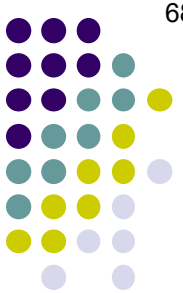

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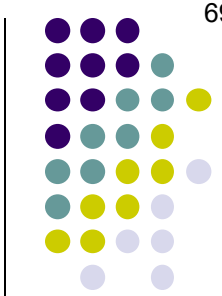

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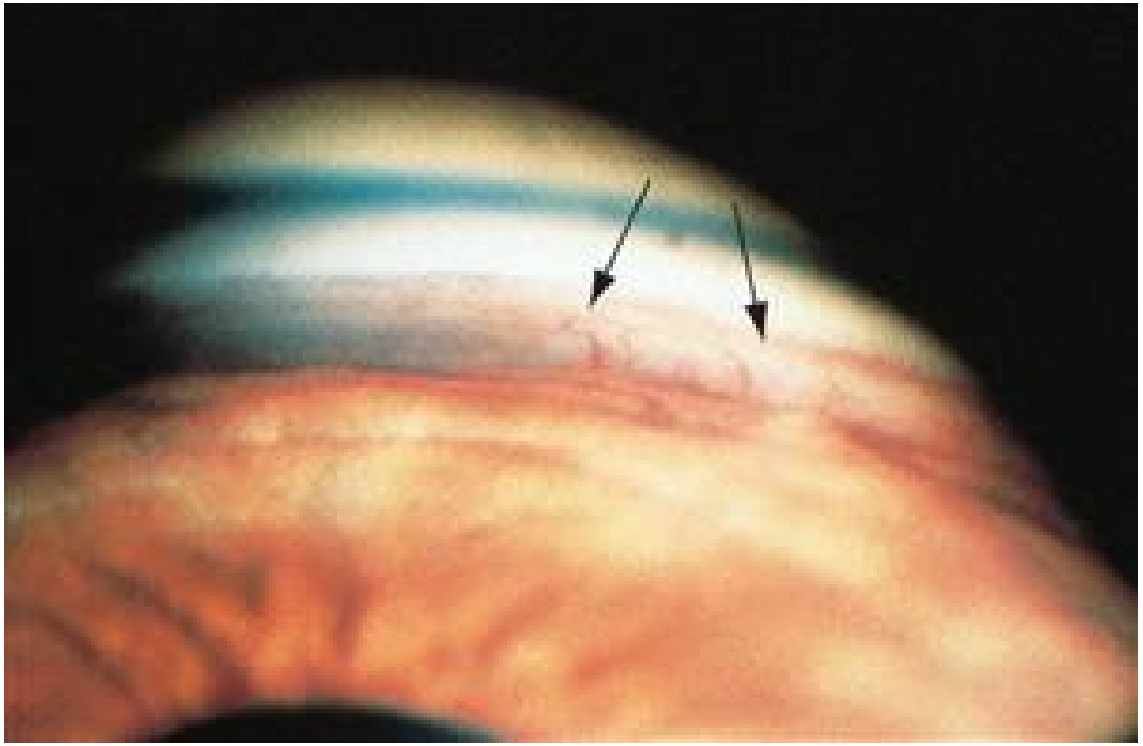

Fuchs heterochromic iridocyclitis. Fine vessels (arrows) are seen crossing the TM. This NVA is **not** accompanied by a fibrovascular membrane and does not result in PAS formation and subsequent secondary angle closure.

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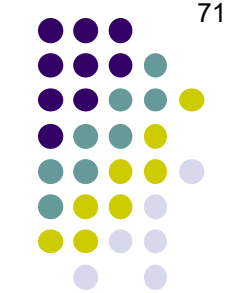

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The NVA vessels in FHI rupture easily, and it not uncommon for FHI pts to develop a small hyphema after the paracentesis wound is made at the start of cataract surgery. What is the eponymous name for this classic finding?

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Is Amsler's sign pathognomonic for FHI?

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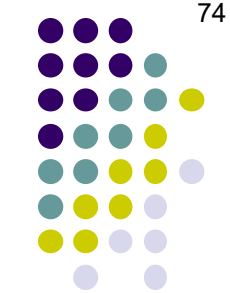

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-- **Neovascularization of the angle (NVA)** is common, but does not lead to angle closure

The NVA … develop a small hyp… surgery. What is th…
Amsler's …

Can other clinical maneuvers cause these vessels to bleed?

Is Amsler's sign pathognomonic for FHI?
No

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis
--Trabeculitis
--Fuchs heterochromic iridocyclitis
--Posner-Schlossman

--Corneal endothelial abnormality

What exam findings comprise the 'classic triad' of FHI? (Hint: Elevated IOP is not one of them.)
Heterochromia iridis, cataract, and stellate KP

*How common is **glaucoma in FHI**?*
It develops in about 25-50% of cases

*Is **the angle in FHI** glaucoma open, or is it closed?*
Open

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Can other clinical maneuvers cause these vessels to bleed?
Yes—hyphema in FHI can occur subsequent to [ ],
and even [two words]

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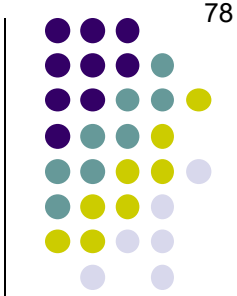

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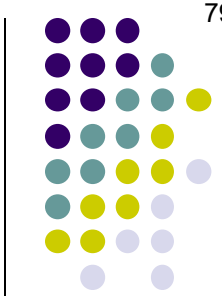

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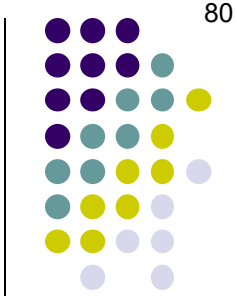

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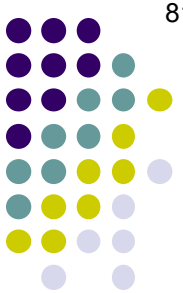

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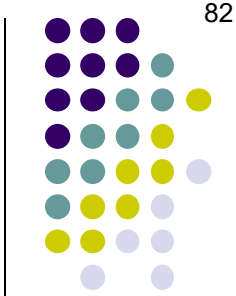

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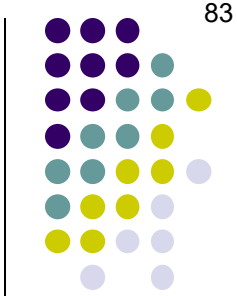

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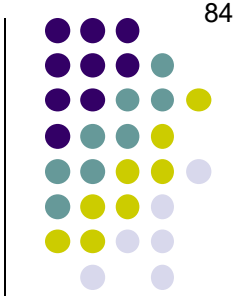

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Who is the typical pt?
A middle-aged adult

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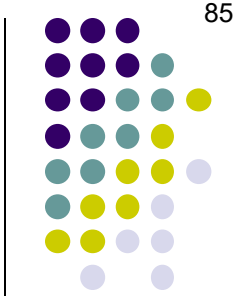

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Is there a gender predilection?

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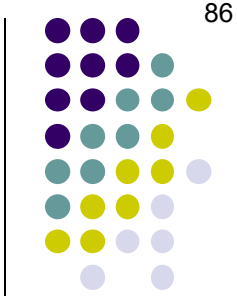

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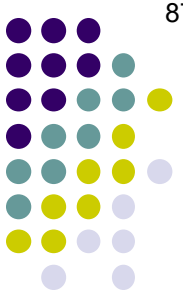

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How well does FHI respond to steroid therapy?

H

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W

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W

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No

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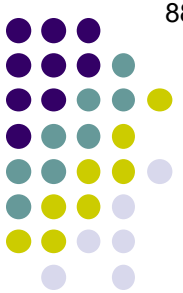

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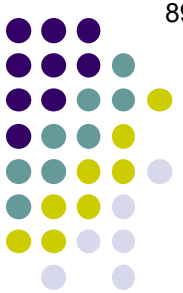

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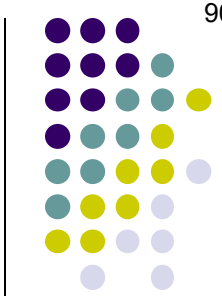

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No

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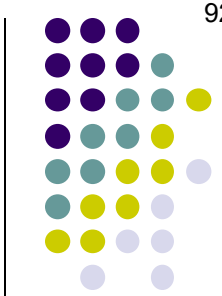

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Is there a gender predilection?
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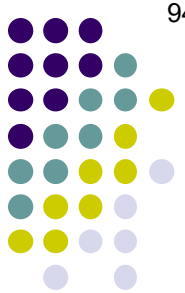

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Is there a gender predilectio
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Is cataract surgery in FHI associated with an increased risk of intraoperative complications?

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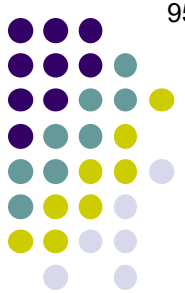

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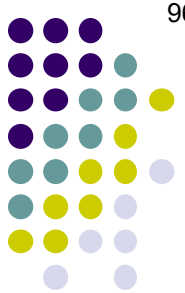

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--Corneal endothelial abnormality

--Increased

--Secondary

-What is the noneponymous name for Posner-Schlossman?

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

--Corneal endothelial abnormality

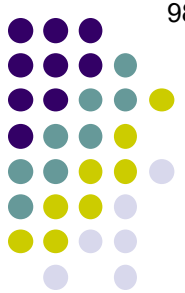
-What is the noneponymous name for Posner-Schlossman?

Glaucomatocyclitic crisis

--Increased

--Secondary

Unilateral ↑ IOP associated with:



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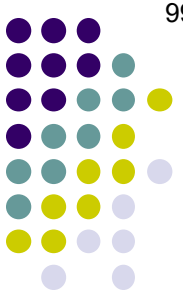
Glaucomatocyclitic crisis

Who is the typical pt?

Unilateral ↑ IOP associated with:



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--Increased

--Secondary

-What is the noneponymous name for Posner-Schlossman?
Glaucomatocyclitic crisis

Who is the typical pt?
An adult age 20-50

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

--Corneal endothelial abnormality

--Increased

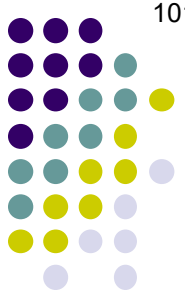
--Secondary

-What is the noneponymous name for Posner-Schlossman?
Glaucomatocyclitic crisis

Who is the typical pt?
An adult age 20-50

Does the inflammatory component tend to be mild, or severe?

Unilateral ↑ IOP associated with:



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--Increased

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-What is the noneponymous name for Posner-Schlossman?
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Who is the typical pt?
An adult age 20-50

Does the inflammatory component tend to be mild, or severe?
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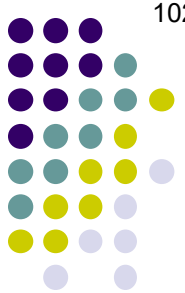

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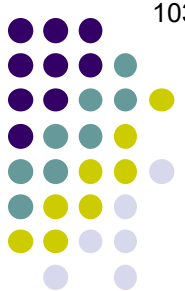
Does the IOP elevation tend to be mild, or severe?

Unilateral ↑ IOP associated with:



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--Corneal endothelial abnormality

--Increased

--Secondary

-What is the noneponymous name for Posner-Schlossman?
Glaucomatocyclitic crisis

Who is the typical pt?
An adult age 20-50

Does the inflammatory component tend to be mild, or severe?
Mild

Does the IOP elevation tend to be mild, or severe?
Severe

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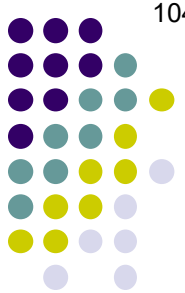

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How severe?

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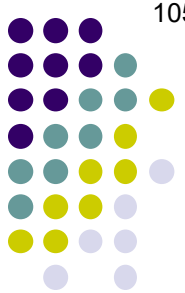

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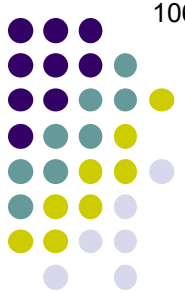
Severe

How severe?
IOP in the 40-60 range is typical

Unilateral ↑ IOP associated with:



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Is the angle open, or closed?

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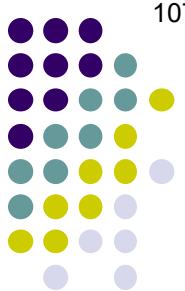

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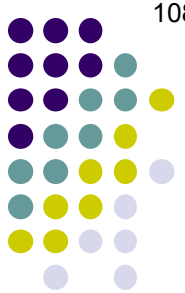

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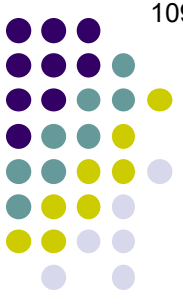

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How long do the crises last?
Hours to weeks

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Do they recur?

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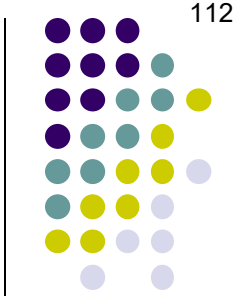

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Do they recur?
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What is/are the presenting complaint(s)?

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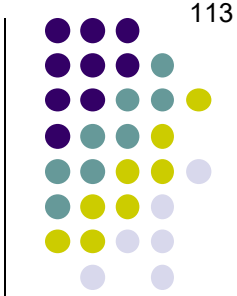

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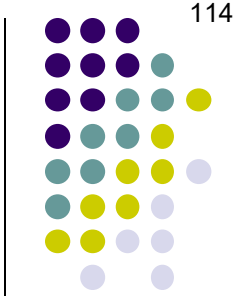
Hours to weeks

Do they recur?
Yes

What is/are the presenting complaint(s)?
Unilateral pain, blurred vision, haloes around lights

Unilateral ↑ IOP associated with:



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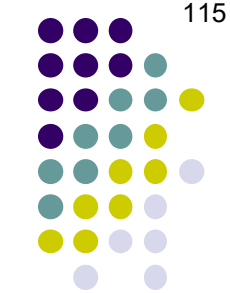
What is/are the presenting complaint(s)?
Unilateral pain, **blurred vision, haloes around lights**

What is the cause of the blurred vision/haloes?

Unilateral ↑ IOP associated with:



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Is the angle open, or closed?
Open

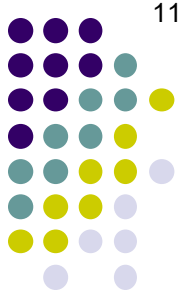
How long do the crises last?
Hours to weeks

Do they recur?
Yes

What is/are the presenting complaint(s)?
Unilateral pain, **blurred vision, haloes around lights**

What is the cause of the blurred vision/haloes?
Corneal edema secondary to the high IOP

Unilateral ↑ IOP associated with:



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Glaucomatocyclitic crisis

Infection with what entity has been implicated in the pathogenesis of P-S syndrome?
CMV, a member of the [redacted] family

Does the inflammatory component tend to be mild, or severe?
Mild

Does the IOP elevation tend to be mild, or severe?
Severe

--Secondary

Is the angle open, or closed?
Open

How long do the crises last?
Hours to weeks

Do they recur?
Yes

Unilateral ↑ IOP associated with:

--Intraocular inflammation

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What four anterior uveitis etiologies are notorious for elevating IOP?
1) Herpesvirus (all forms)
2) Toxoplasmosis
3) Sarcoidosis
4) Syphilis

-What is the noneponymous name for Posner-Schlossman?
Glaucomatocyclitic crisis

Infection with what entity has been implicated in the pathogenesis of P-S syndrome?
CMV, a member of the **Herpesvirus** family

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Mild

Does the IOP elevation tend to be mild, or severe?
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--Secondary

Is the angle open, or closed?
Open

How long do the crises last?
Hours to weeks

Do they recur?
Yes

Unilateral ↑ IOP associated with:

--Intraocular inflammation

--Anterior uveitis

--Trabeculitis

--Fuchs heterochromic iridocyclitis

--Posner-Schlossman

--Corneal endothelial abnormality

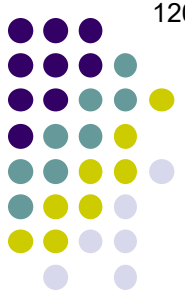
-- a dystrophy

-- several syndromes

--Increased episcleral venous pressure

--Secondary glaucoma

Unilateral ↑ IOP associated with:



--Intraocular inflammation

- --Anterior uveitis
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- --Posner-Schlossman

--Corneal endothelial abnormality

- --PPMD *(posterior polymorphous dystrophy)*
- --ICE *(iridocorneal endothelial syndrome)*

Increased episcleral venous pressure

--Secondary glaucoma

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In a nutshell, what is abnormal about the endothelial cells in PPMD?

--Seco

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They 'behave' like epithelial cells and/or fibroblasts.

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In a nutshell, what is abnormal about the endothelial cells in PPMD?
They 'behave' like epithelial cells and/or fibroblasts. Specifically and problematically, the endothelial cells [ ], form [two words], and [ ]–none of which normal endothelial cells do.

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In a nutshell, what is abnormal about the endothelial cells in PPMD?
They 'behave' like epithelial cells and/or fibroblasts. Specifically and problematically, the endothelial cells **proliferate** , form **multiple layers** , and **migrate** –none of which normal endothelial cells do.

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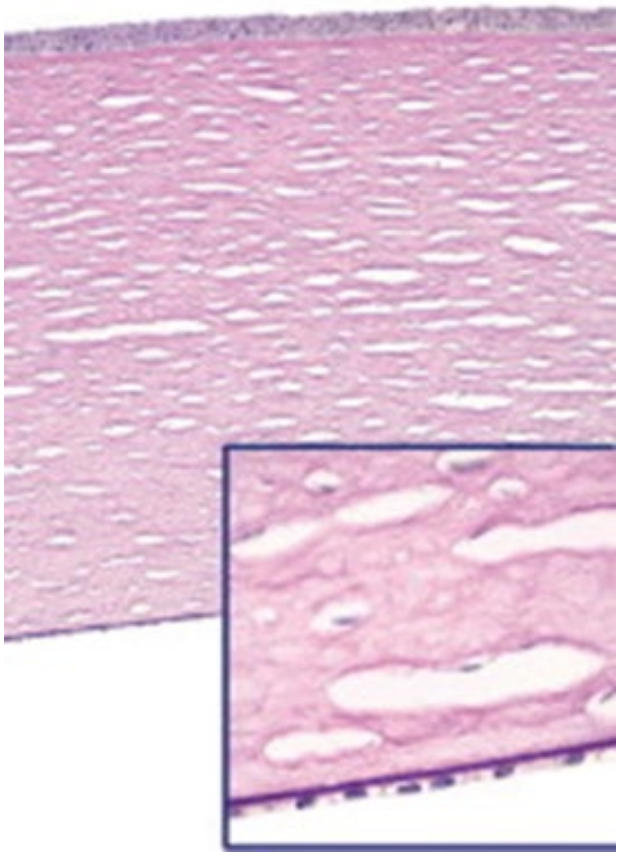

Normal cornea. Note the single-cell-thick nature of the endothelial cells.

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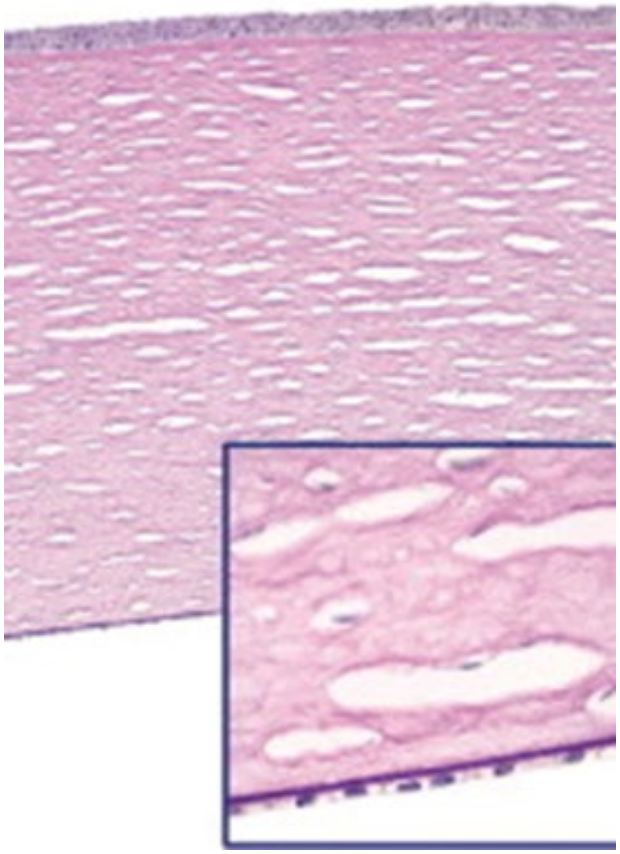

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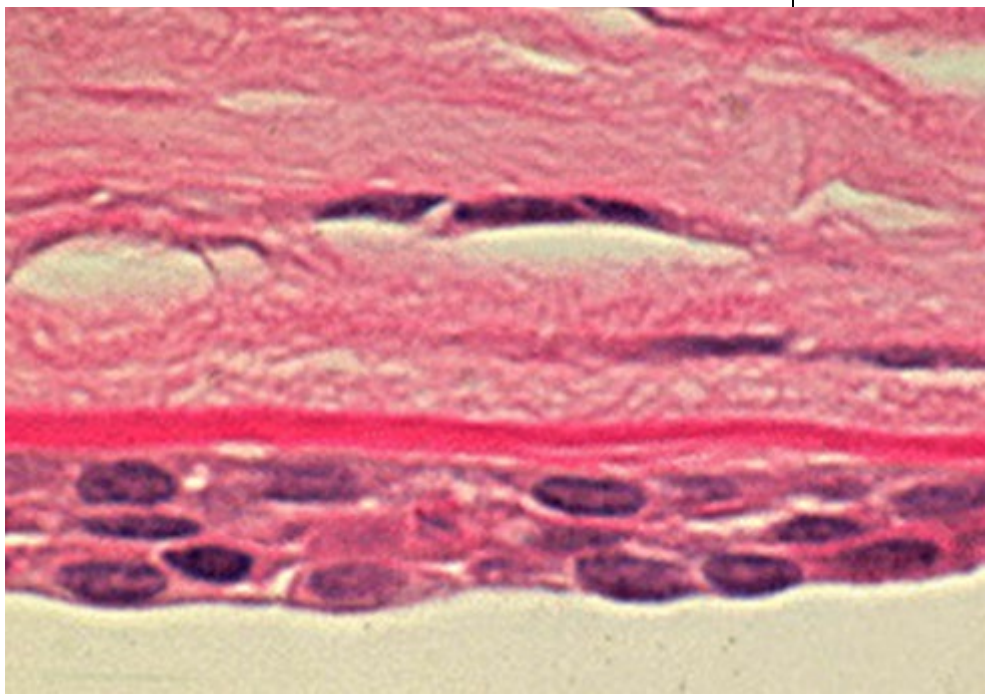

Posterior polymorphous corneal dystrophy. Instead of being lined by cells with the attributes of corneal endothelium, the posterior cornea is covered by cells with **epithelial/fibroblast-like** features.

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PPMD presents with three posterior-K slit-lamp findings. What are they?

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--Linear band-shaped opacities
--Vesicular lesions
--Diffuse opacities

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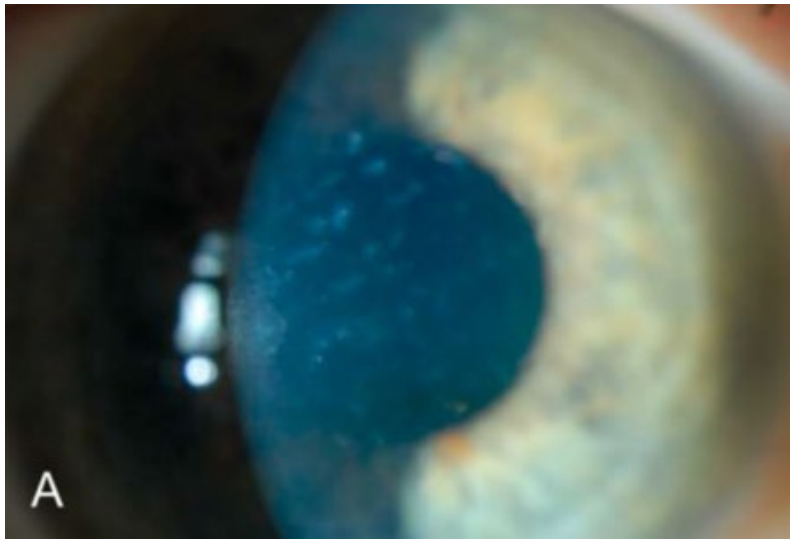
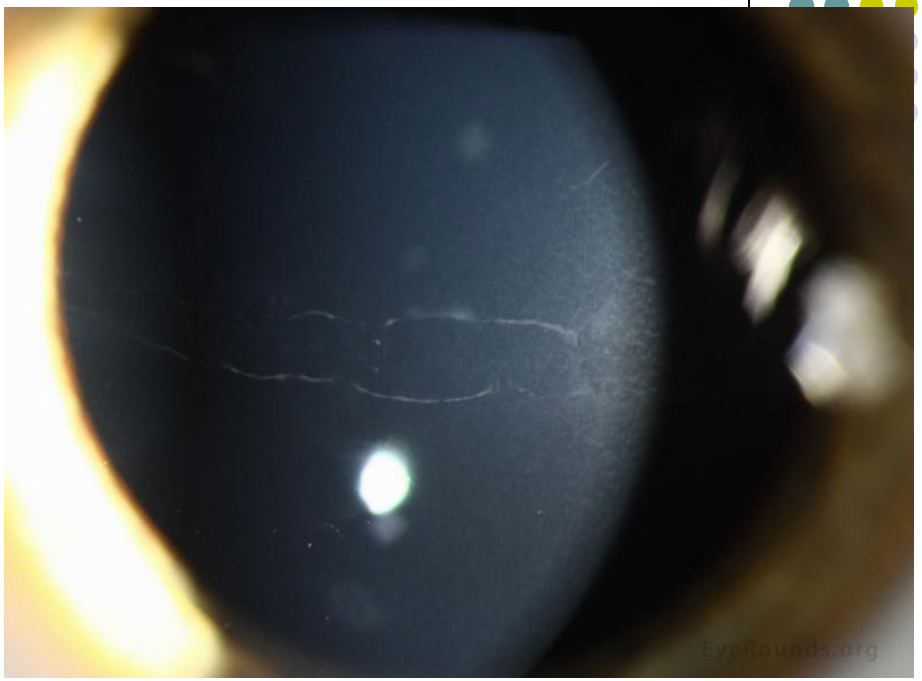
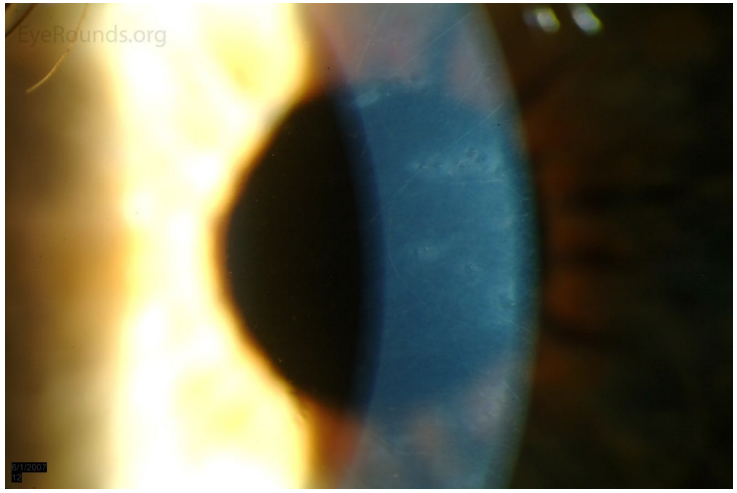


Diffuse opacities



Linear band-shaped opacities



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PPMD

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Tru dat

Given this, how can it cause **unilateral** *IOP elevation?*

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--Intraocular inflammation
- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality
- **--PPMD**

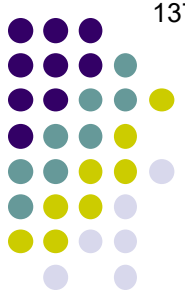
In a nutshell, what is abnormal about the endothelial cells in PPMD?
They 'behave' like epithelial cells and/or fibroblasts. Specifically and problematically, the endothelial cells **proliferate** , form **multiple layers** , and **migrate** –none of which normal endothelial cells do.

Hol up—as a dystrophy, PPMD must by definition be bilateral, yes?
Tru dat

Given this, how can it cause **unilateral** *IOP elevation?*
Because it can be highly asymmetric

Is PPMD painful? Does it affect vision?
In the majority of pts, PPMD is a stable, painless and visually insignificant condition. However, severe cases can be **associated with glaucoma**, stromal edema, and significant vision loss.

Unilateral ↑ IOP associated with:



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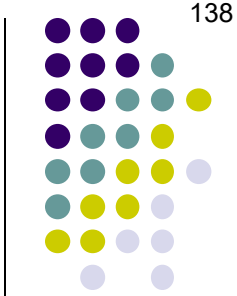

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- Increased episcleral venous pressure

Briefly, what is ICE?

A progressive, nonfamilial, unilateral disorder characterized by abnormalities of the corneal endothelium and iris, as well as PAS formation

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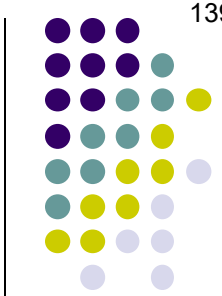

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Demographically speaking, who is the typical patient?

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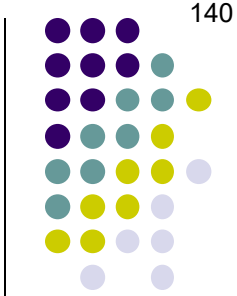

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A young-to-middle-aged adult female

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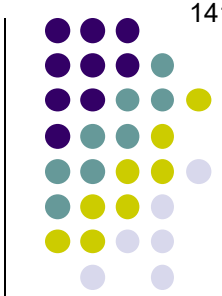

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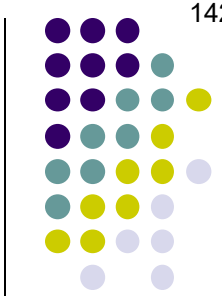

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  --ICE

The BCSC books recognize three ICE variants—what are they?

--?
--?
--?

A young-to-middle-aged adult female

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--Iris nevus syndrome
--Chandler syndrome
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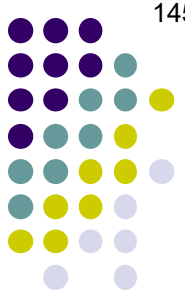

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--Essential iris atrophy: ***?***

A young-to-middle-aged adult female

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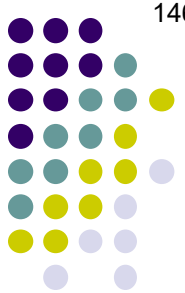

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--Iris nevus syndrome: Abnormal endothelium; PAS; elevated IOP
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A young-to-middle-aged adult female

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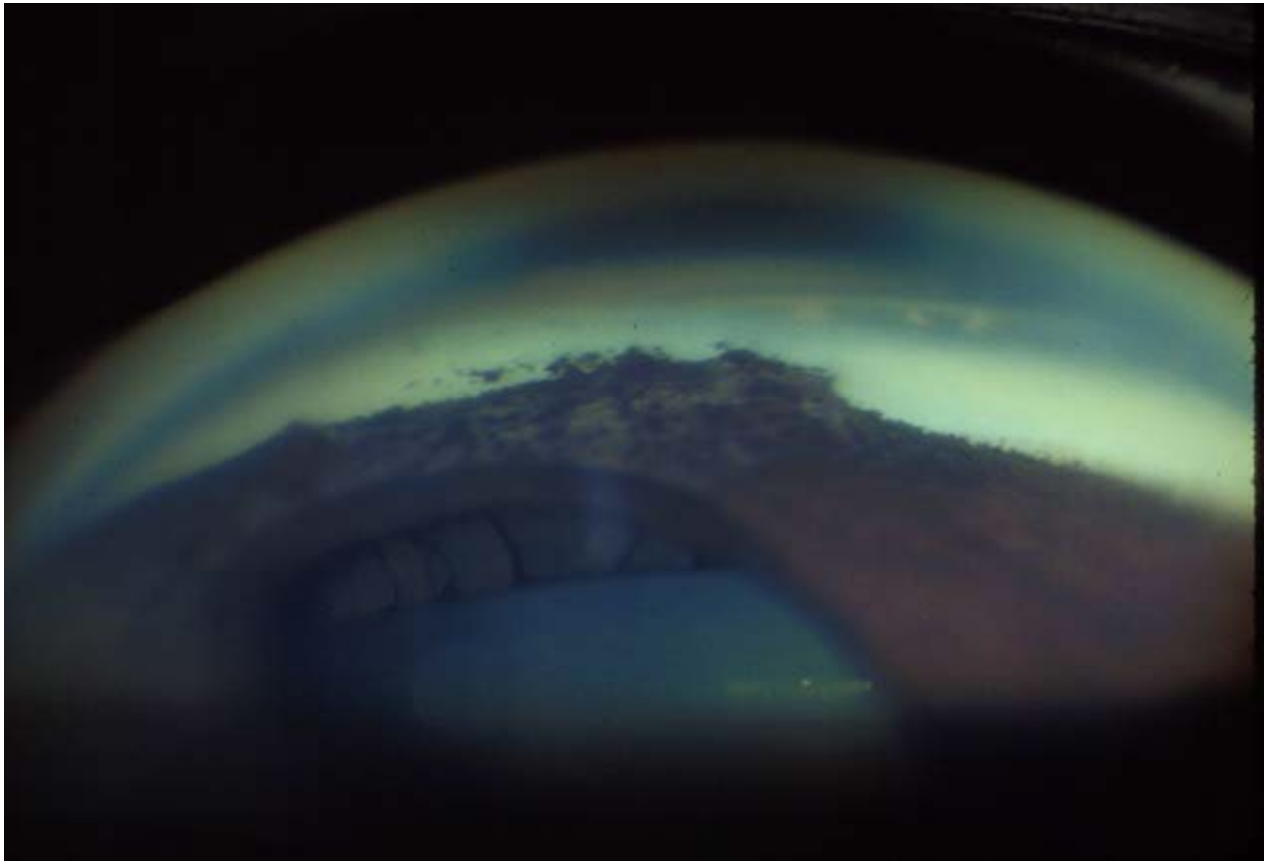

ICE: PAS

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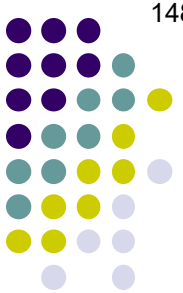

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A young-to-middle-aged adult female

What is the classic metal-related description of the endothelium?

How
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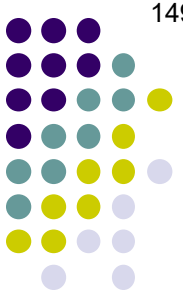

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A young-to-middle-aged adult female

What is the classic metal-related description of the endothelium?
'Hammered silver'

How
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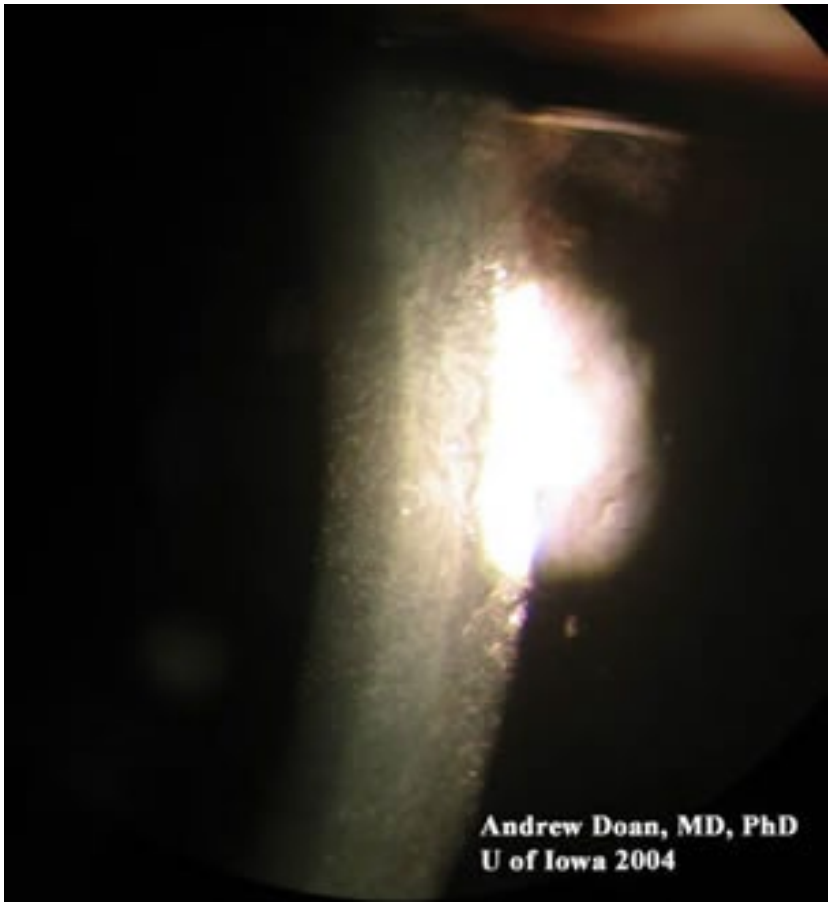
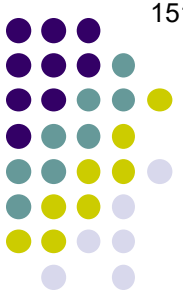


Low mag

High mag

ICE: ‘Hammered silver’ corneal endothelium

Unilateral ↑ IOP associated with:



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The BCSC books recognize three ICE variants—what are they? All have three findings in common—what are they?

--Iris nevus syndrome: Abnormal endothelium; PAS; *elevated IOP (not so much)?*
--Chandler syndrome: Abnormal endothelium; PAS; *elevated IOP (not so much)?*
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One variant is less likely than the others to manifest elevated IOP—which one?

How will a pt with ICE
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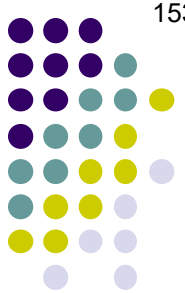

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A young-to-middle-aged adult female

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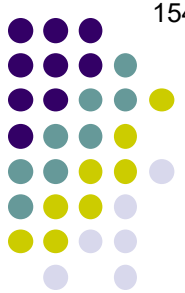

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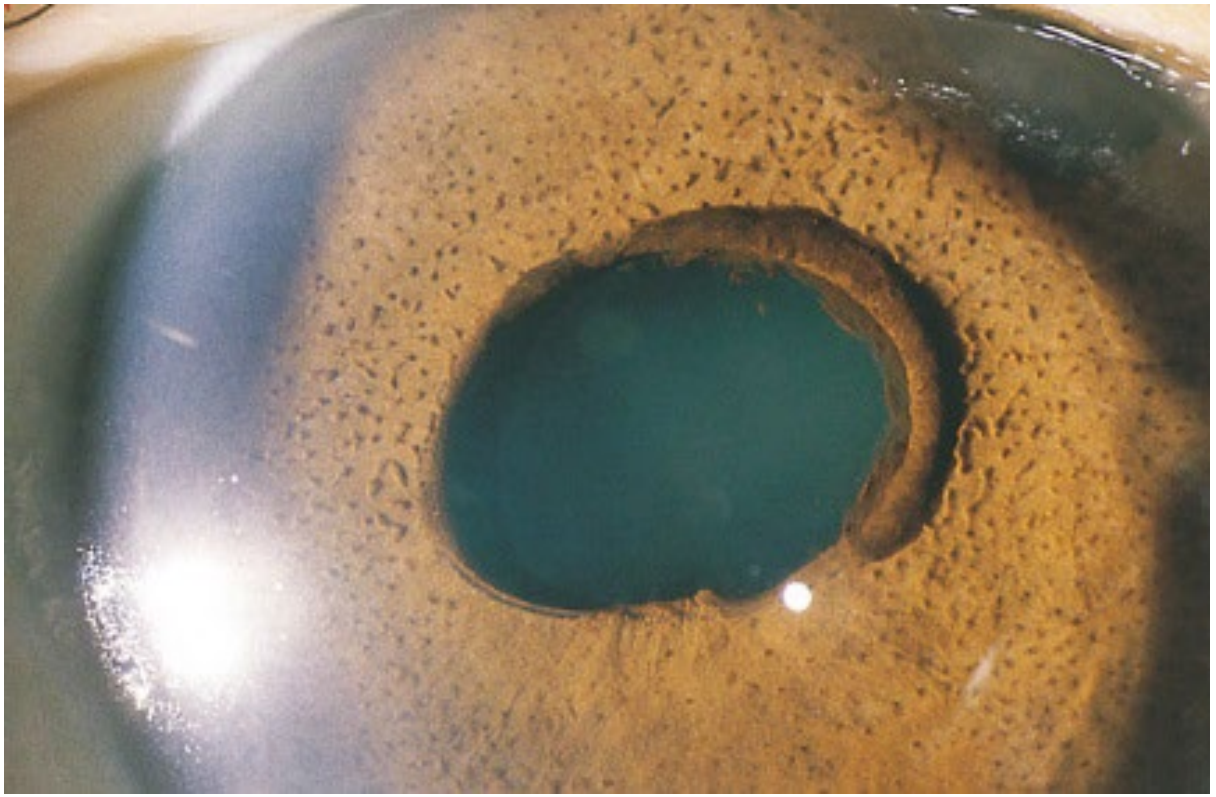

Iris nevus syndrome

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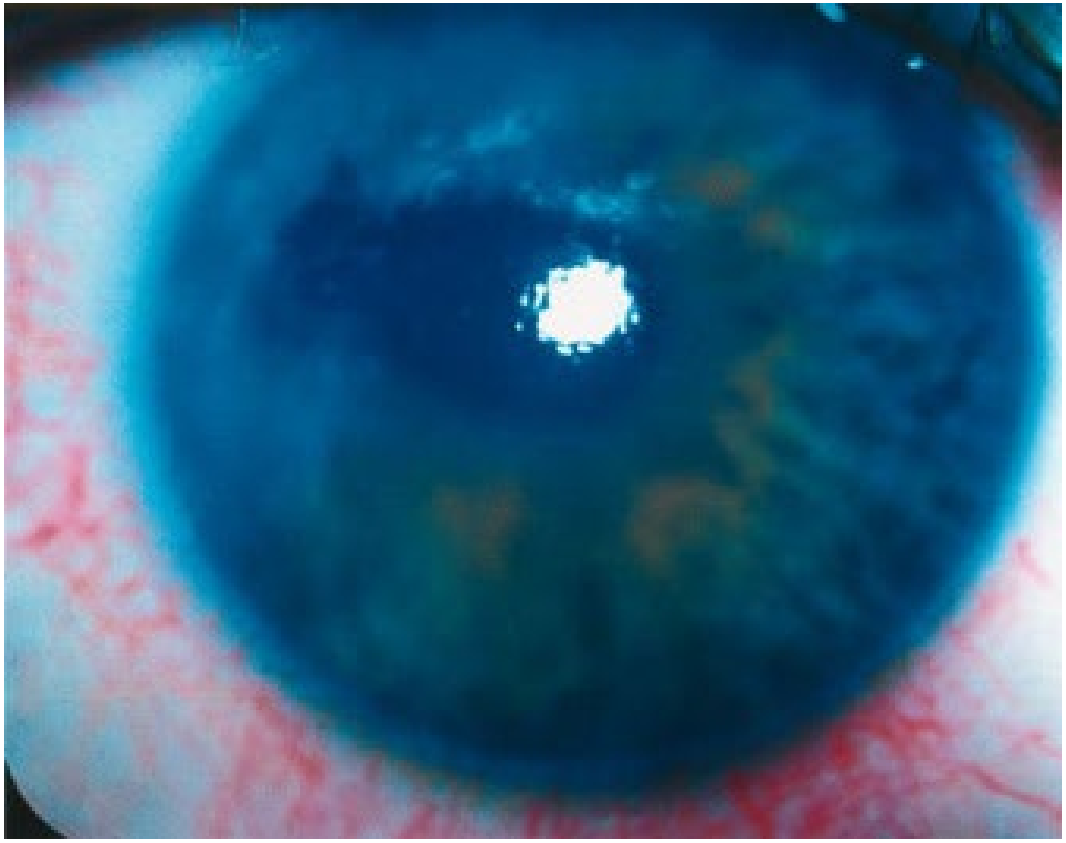

Chandler syndrome

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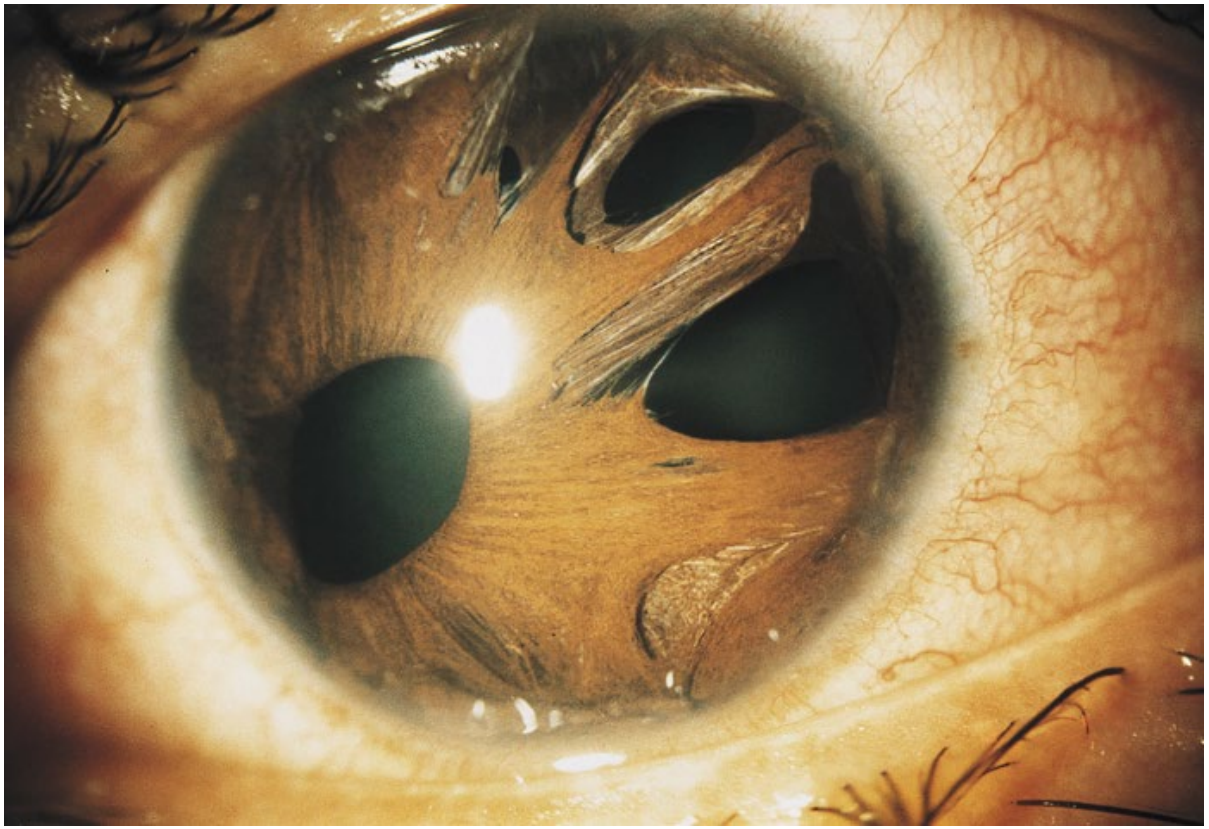

Essential iris atrophy

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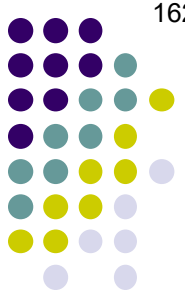

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--Increased episcleral venous pressure

--Secondary glaucoma

How common is glaucoma in each?
--ICE:
--PPMD:

Unilateral ↑ IOP associated with:

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How common is glaucoma in each?
--ICE: Very common—80 to 100% of cases
--PPMD: Not that common—25% of cases

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What is the mechanism for increased IOP?
--ICE:
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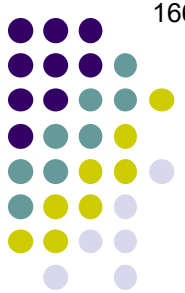
What is the mechanism for increased IOP?
--ICE: Angle closure via PAS and/or a membrane
--PPMD: Unclear; angle can be closed a la ICE, but some have an open angle

Unilateral ↑ IOP associated with:



--Intraocular inflammation
- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality
- **--PPMD**
- **--ICE**

--Increased episcleral venous pressure

--Secondary glaucoma

How common is glaucoma in each?

What is the take-home message regarding PPMD/ICE and unilateral elevated IOP?

--PPMD: Unclear; angle can be closed a la ICE, but some have an open angle

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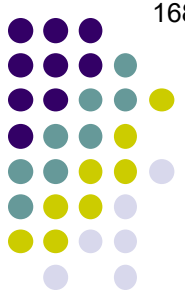
How common is glaucoma in each?

--*PPMD:* Unclear; angle can be closed a la ICE, but some have an open angle

What is the take-home message regarding PPMD/ICE and unilateral elevated IOP?
It is incumbent upon you to do a thorough slit-lamp examination of the posterior corneal surface in all pts with unilateral elevated IOP!

Unilateral ↑ IOP associated with:



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For more on PPMD, see slide-set K45

For more ICE, see slide-set K26

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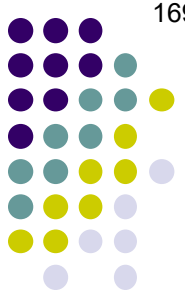

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Recall that the Goldmann equation for IOP contains two terms:
--The first term…

--Secondary glaucoma

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Recall that the Goldmann equation for IOP contains two terms:
--The first term…quantifies the balance between aqueous *formation* and aqueous *egress*

--Secondary glaucoma

$$IOP = \frac{\text{Aqueous Formation Rate (}\mu\text{L/min)}}{\text{Outflow Facility (}\mu\text{L/min/mmHg)}} +$$

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Recall that the Goldmann equation for IOP contains two terms:
--The first term…quantifies the balance between aqueous *formation* and aqueous *egress*
--The second term in the equation is…

--Secondary glaucoma

$$IOP = \frac{\text{Aqueous Formation Rate (}\mu\text{L/min)}}{\text{Outflow Facility (}\mu\text{L/min/mmHg)}} + \text{Second term}$$

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Recall that the Goldmann equation for IOP contains two terms:
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$$IOP = \frac{\text{Aqueous Formation Rate (}\mu\text{L/min)}}{\text{Outflow Facility (}\mu\text{L/min/mmHg)}} + \text{Episcleral Venous Pressure (mmHg)}$$

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Recall that the Goldmann equation for IOP contains two terms:
--The first term…quantifies the balance between aqueous *formation* and aqueous *egress*
--The second term in the equation is…*EVP*.
Thus, any ocular and/or systemic conditions that lead to a persistent increase in EVP can produce a persistent elevation in IOP and thus glaucoma. And if this condition affects only one eye, it can produce unilateral elevated IOP.

--Secondary glaucoma

$$IOP = \frac{\text{Aqueous Formation Rate (}\mu\text{L/min)}}{\text{Outflow Facility (}\mu\text{L/min/mmHg)}} + \text{Episcleral Venous Pressure (mmHg)}$$

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--Increased episcleral venous pressure
- -- a specific intracranial problem
- -- a general intrathoracic problem
- -- a phakomatosis
- -- a very general ophthalmic problem

--Secondary glaucoma

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- --ICE

--Increased episcleral venous pressure
- --CCF *(carotid-cavernous sinus fistula)*
- --SVC syndrome *(SVC = superior vena cava)*
- --Sturge-Weber
- --Orbital inflammation

--Secondary glaucoma

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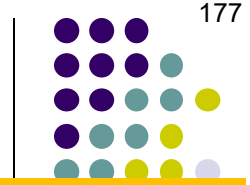

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What is the fundamental anatomical abnormality in CCF?

--Secondary glauc

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How does a CCF lead to unilateral increased IOP?

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When the blood pressure within the CS exceeds that of the venous structures that drain into it (including the superior ophthalmic vein), venous drainage is impeded.

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What two classes of mechanism account for the formation of CCF?

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What two classes of mechanism account for the formation of CCF?
They can be traumatic or spontaneous

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When the blood pressure within the CS exceeds that of the venous structures that drain into it (including the superior ophthalmic vein), venous drainage is ultimately results in

Demographically speaking, who gets:
--Traumatic CCF?
--Spontaneous CCF?

What two classes of mechanism account for the formation of CCF?
They can be **traumatic** or **spontaneous**

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Demographically speaking, who gets:
--Traumatic CCF? **Young persons**
--Spontaneous CCF? **Middle-aged to elderly females**

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What is the classic sign of CCF on imaging?

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What is the classic sign of CCF on imaging?
A dilated and tortuous superior ophthalmic vein

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When the blood pressure within the CS exceeds that of the venous structures that drain into it (**including the superior ophthalmic vein**), venous drainage is impeded. Retrograde transmission of this impedance ultimately results in increased EVP, which results in turn in elevated IOP.

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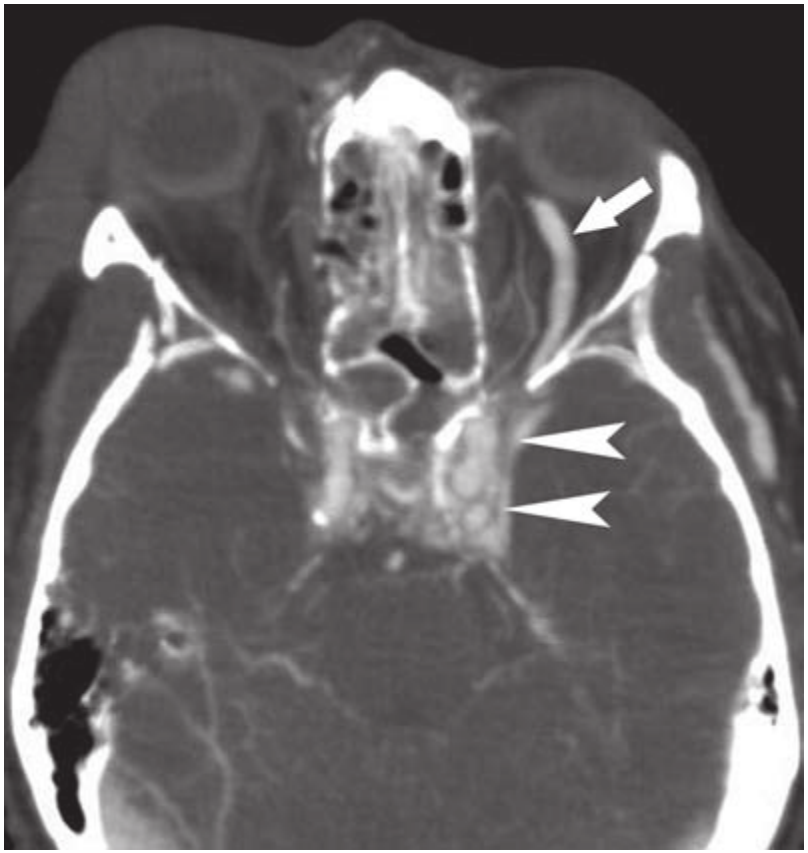
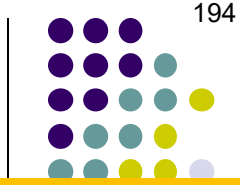


Carotid cavernous fistula in a 20-year-old man s/p motor vehicle collision. CT angiography shows asymmetric enlargement of the left cavernous sinus (arrowheads) and left superior ophthalmic vein (arrow).

Unilateral ↑ IOP associated with:



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In addition to unilateral increased IOP, what other signs/symptoms are commonly associated with a CCF?
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*How does a CCF lead to **unilateral increased IOP**?*
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In addition to unilateral increased IOP, what other signs/symptoms are commonly associated with a CCF?
--A chronically **red eye** (beware of the little old lady with 'chronic conjunctivitis' that never seems to get any better!)
--Chemosis
--Proptosis (in high-flow CCF)
--Tinnitus

*How does a CCF lead to **unilateral increased IOP**?*
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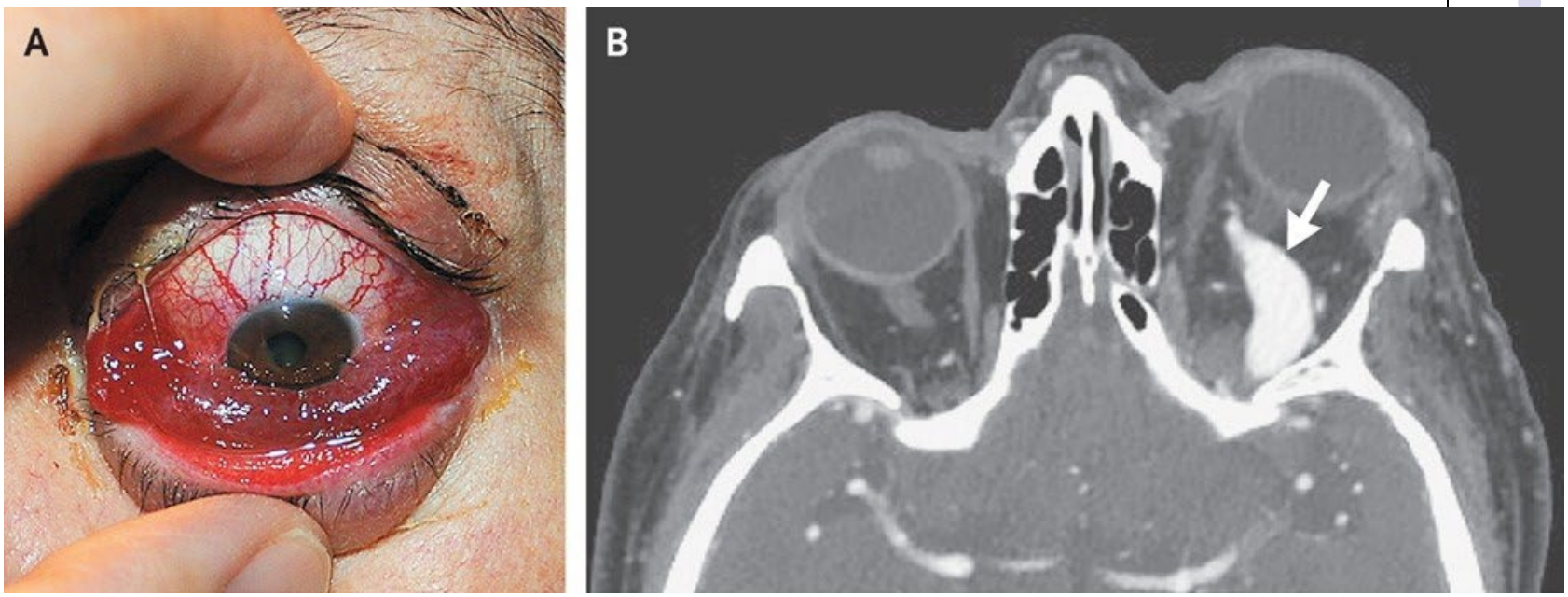

A 55 year old woman with a history of HTN presented with a 1-day history of periorbital discomfort, inferior **chemosis**, and **conjunctival injection** of the left eye (Panel A). IOP OS was 48. Exam OD was unremarkable. She reported a 2-year history of episodic headache and pulsatile **tinnitus** in the left ear. Contrast-enhanced computed tomography of the orbit showed **proptosis** and a dilated left superior ophthalmic vein (Panel B, arrow), suggesting the presence of a carotid–cavernous sinus fistula.

Unilateral ↑ IOP associated with:

--Intraocular infla

--Anteric

--Trabec

--Fuchs

--Posner

--Corneal endoth

--Incre

--Orbital

--Secondary glauc

What is the fundamental anatomical abnormality in CCF?

A channel forms that allows direct communication between the carotid artery (or

In addition to unilateral increased IOP, what other signs/symptoms are commonly associated with a CCF?

--A chronically red eye (beware of the little old lady with 'chronic conjunctivitis' that never seems to get any better!)

What slit-lamp finding concerning the appearance of the conj vessels is a tipoff that you're dealing with a CCF?

impeded. Retrograde transmission of this impedance ultimately results in increased EVP, which results in turn in elevated IOP.

What two classes of mechanism account for the formation of CCF?

They can be **traumatic** or **spontaneous**

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The vessels have a kinked or 'corkscrew' appearance

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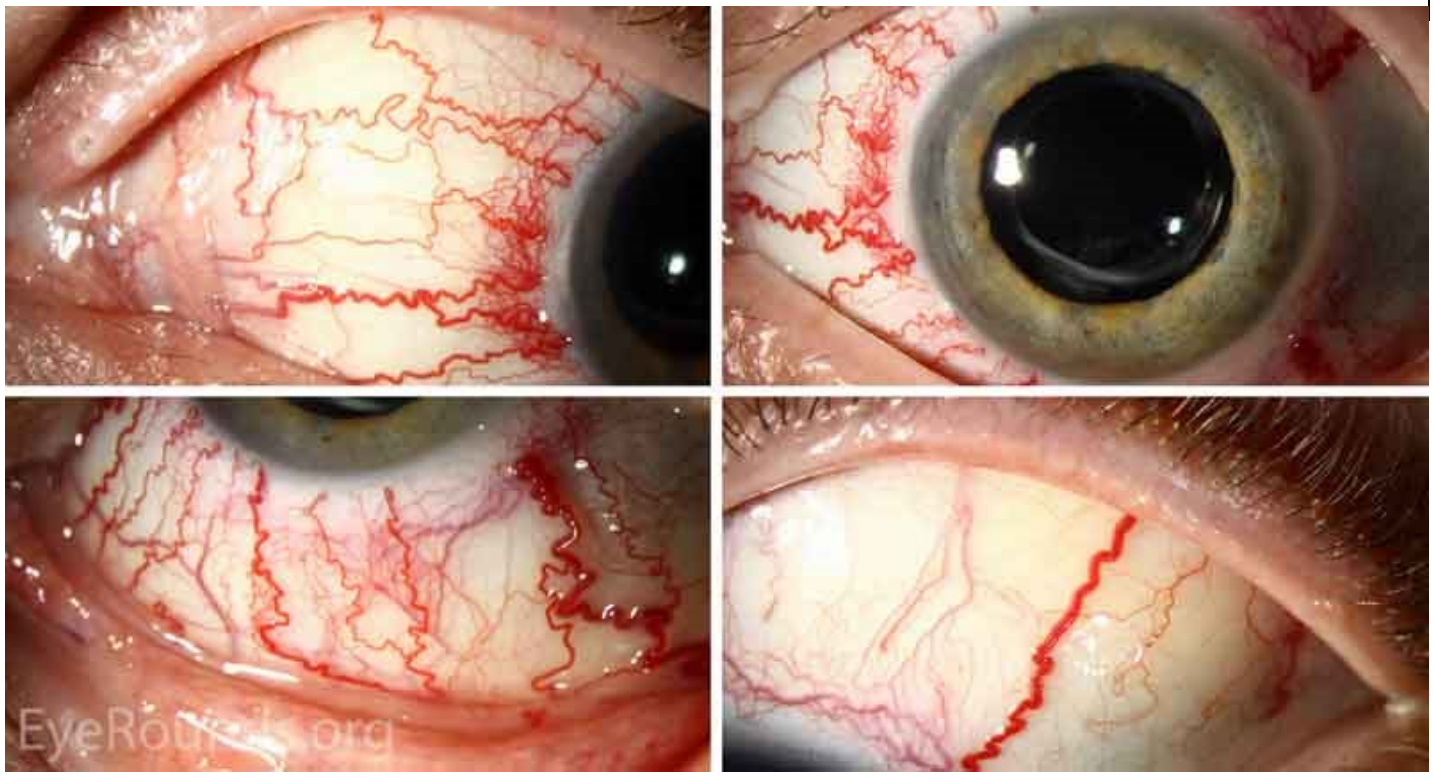

Corkscrewing of conj vessels 2ndry to CCF

Unilateral ↑ IOP associated with:

--Intraocular infla
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What causes this corkscrewing?

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What causes this corkscrewing?
Arterialization of blood flow in the vessels (think about how a garden hose will twist and kink when the water is turned on but is held in by a closed nozzle on the end of the hose)

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--ICE
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--CCF
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--Sturge
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--A chronically **red eye** (beware of the little old lady with 'chronic conjunctivitis' that never seems to get any better!)
--Chemosis
--Proptosis (i
--Tinnitus

What sign may be present in a pt who reports the symptom of tinnitus, and should be checked for?

How does a
When the blo
that drain into it (including the superior ophthalmic vein), venous drainage is impeded. Retrograde transmission of this impedance ultimately results in increased EVP, which results in turn in elevated IOP.

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A bruit

How should one check for a bruit in cases of suspected CCF?

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What sign may be present in a pt who reports the symptom of tinnitus, and should be checked for?
A bruit

How should one check for a bruit in cases of suspected CCF?
By auscultating the globe (through closed lids of course), and at the temporal region

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When the blo
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- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality
- --PPMD
- --ICE

--Increased episcleral venous pressure
- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - -- infectious condition
  - -- noninfectious condition
  - -- ditto

--Secondary glaucoma

$$IOP = \frac{\text{Aqueous Formation Rate (}\mu\text{L/min)}}{\text{Outflow Facility (}\mu\text{L/min/mmHg)}} + \text{Episcleral Venous Pressure (mmHg)}$$

Unilateral ↑ IOP associated with:

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--Corneal endothelial abnormality
- --PPMD
- --ICE

--Increased episcleral venous pressure
- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED *(Thyroid eye disease)*

--Secondary glaucoma

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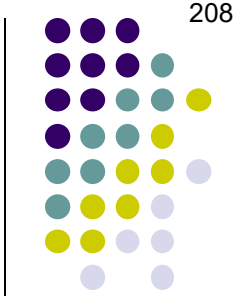
Unilateral ↑ IOP associated with:



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- --Posner-Schlossman

--Corneal endothelial abnormality
- --PPMD
- --ICE

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- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - **--cellulitis**
  - **--pseudotumor**
  - **--TED**

--Secondary glaucoma

By what two mechanisms do these raise EVP?
1)

2)

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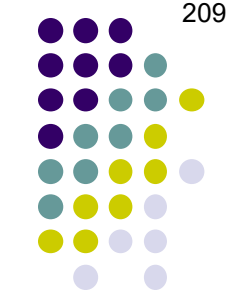

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- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - **--cellulitis**
  - **--pseudotumor**
  - **--TED**

--Secondary glaucoma

By what two mechanisms do these raise EVP?
1) Inflammation near the vortex veins causes them to swell, decreasing lumen diameter and thereby impeding drainage
and/or
2)

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Unilateral ↑ IOP associated with:

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- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posner-Schlossman

--Corneal endothelial abnormality
- --PPMD
- --ICE

--Increased episcleral venous pressure
- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - **--cellulitis**
  - **--pseudotumor**
  - **--TED**

--Secondary glaucoma

By what two mechanisms do these raise EVP?
1) Inflammation near the vortex veins causes them to swell, decreasing lumen diameter and thereby impeding drainage
and/or
2) Orbital congestion mechanically compresses the vortex veins

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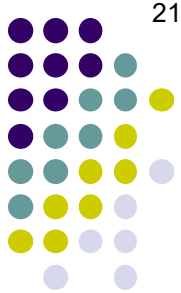
Unilateral ↑ IOP associated with:



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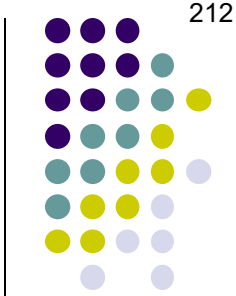
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma

Before we proceed, a note…It is misleading to have a section labeled 'secondary glaucoma.'

No question—proceed when ready

Unilateral ↑ IOP associated with:



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- --CCF
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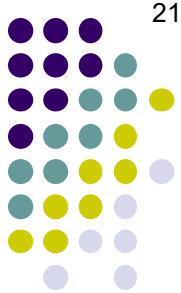
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma

Before we proceed, a note…It is misleading to have a section labeled 'secondary glaucoma.' *Why? Because every etiology above also qualifies as a secondary glaucoma (assuming the elevated IOP results in glaucomatous damage, that is). The term here is used as a catch-all for conditions that didn't fit easily into other categories.*

No question—proceed when ready

Unilateral ↑ IOP associated with:



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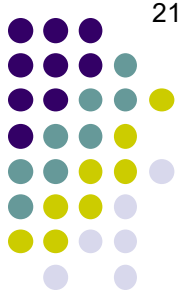
- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral

- a general sort of condition
- a specific condition
- another specific condition

Unilateral ↑ IOP associated with:



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- --CCF
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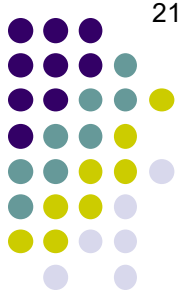
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral

- --Lens-related: — two specific conditions
- --PXS *pseudoexfoliation syndrome*
- --PDS *pigment dispersion syndrome*

Unilateral ↑ IOP associated with:



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- --CCF
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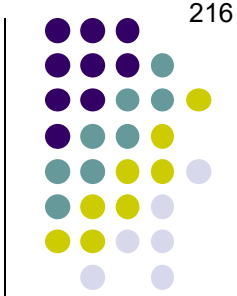
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral
- --Lens-related: Phacolytic, phacomorphic
- --PXS
- --PDS

Unilateral ↑ IOP associated with:



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  - --TED

--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral
- --Lens-related: **Phacolytic**, p
- --PXS
- --PDS

To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?

--Elevated IOP (duh)

--

Unilateral ↑ IOP associated with:

--Intraocular inflammation
- --Anterior uveitis
- --Trabeculitis
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--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral
- --Lens-related: **Phacolytic**, p
- --PXS
- --PDS

To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?
--Elevated IOP (duh)
--A mature or hypermature cataract

Unilateral ↑ IOP associated with:

--Intraocular inflammation
- --Anterior uveitis
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To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?

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--A **mature or hypermature cataract**

What is a mature *cataract?*

Unilateral ↑ IOP associated with:

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To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?

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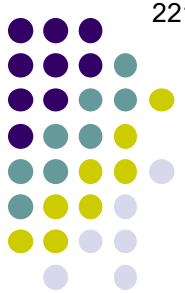
What is a mature *cataract?*

A cortical cataract that has advanced to the point that the entire lens is opaque

Unilateral ↑ IOP associated with:

Mature cataract

Unilateral ↑ IOP associated with:



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--Secondary glaucoma

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- --Lens-related: **Phacolytic**, p
- --PXS
- --PDS

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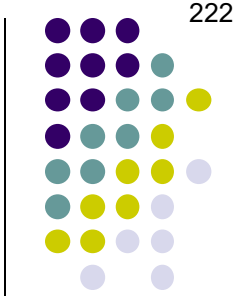
What is a mature *cataract?*

A cortical cataract that has advanced to the point that the entire lens is opaque

What is a hypermature *cataract?*

Unilateral ↑ IOP associated with:



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- --Orbital inflammation
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--Secondary glaucoma

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- --PDS

To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?

--Elevated IOP (duh)

--A **mature or hypermature cataract**

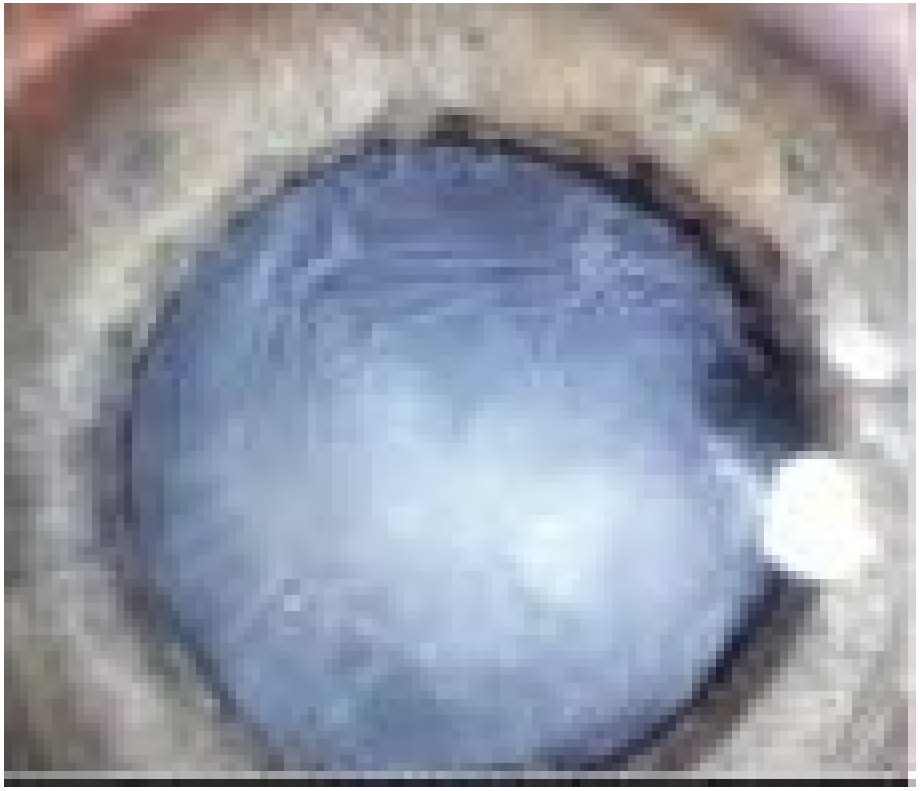
What is a mature *cataract?*

A cortical cataract that has advanced to the point that the entire lens is opaque

What is a hypermature *cataract?*

A mature cataract in which the cortical material has partially liquefied

Unilateral ↑ IOP associated with:



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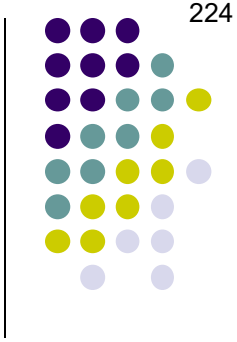

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--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral
- --Lens-related: **Phacolytic**, p
- --PXS
- --PDS

To make the diagnosis of phacolytic glaucoma, what two clinical features must be present?

--Elevated IOP (duh)

--A **mature or hypermature cataract**

What is a mature *cataract?*

A cortical cataract that has advanced to the point that the entire lens is opaque

What is a hypermature *cataract?*

A mature cataract in which the cortical material has partially liquefied

Once the cortical component has liquefied enough to allow the nuclear component to move freely, what is the cataract called?

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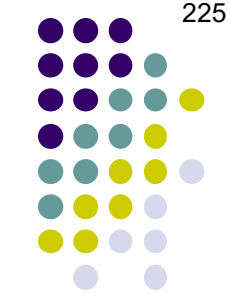

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A cortical cataract that has advanced to the point that the entire lens is opaque

What is a hypermature *cataract?*
A mature cataract in which the cortical material has partially liquefied

Once the cortical component has liquefied enough to allow the nuclear component to move freely, what is the cataract called?
A **morgagnian** cataract

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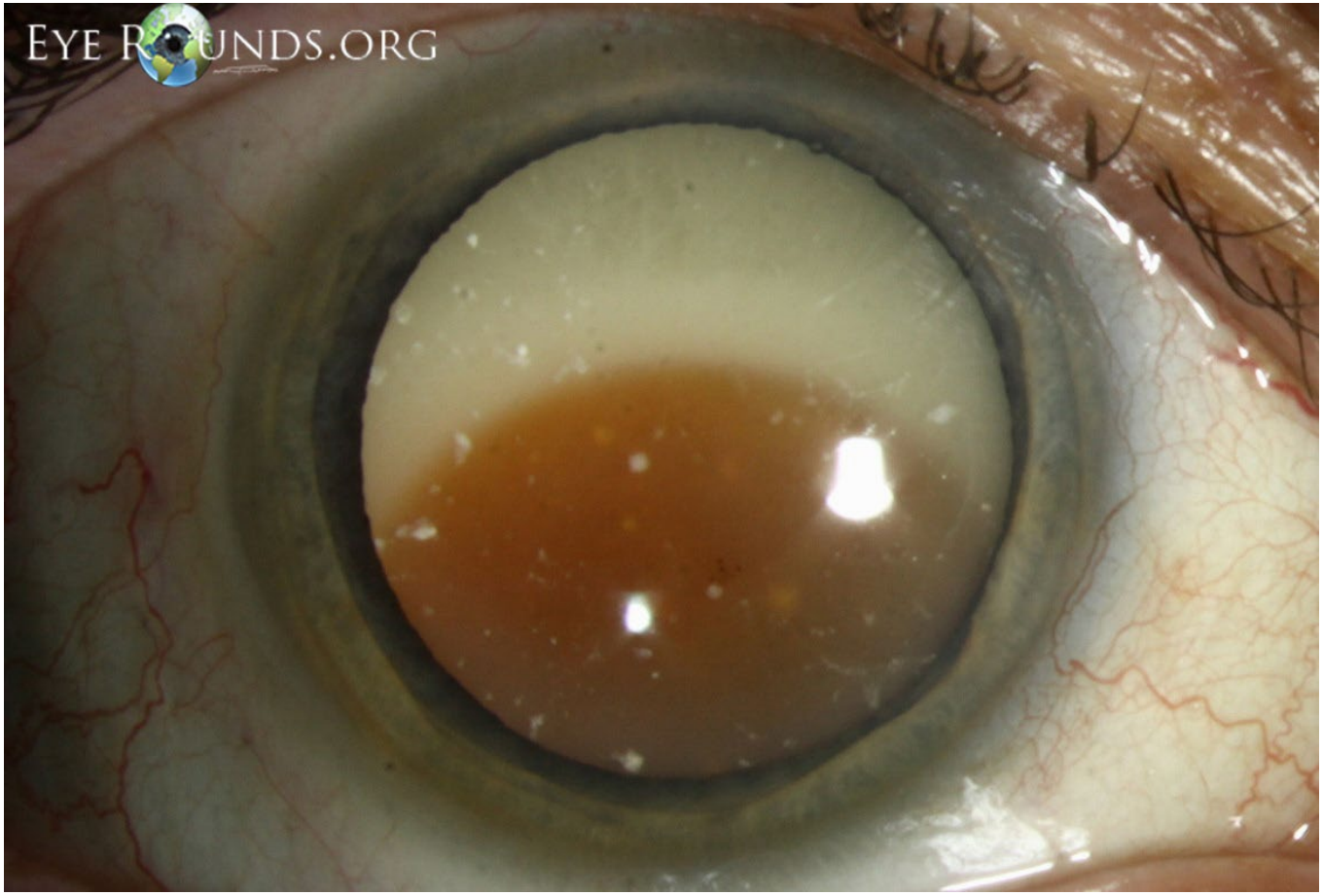

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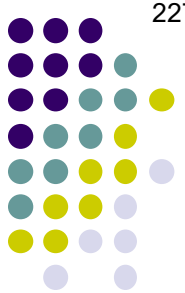

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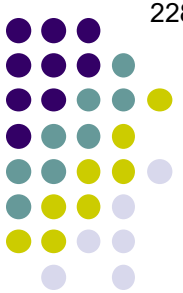

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What is the classic presentation and history?
The pt will complain of the one complaint in an eye that has had a different complaint

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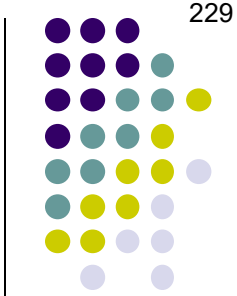

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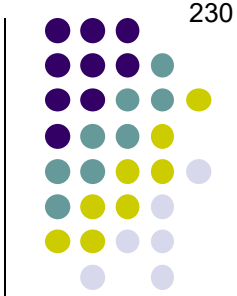

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Is the angle open or closed?

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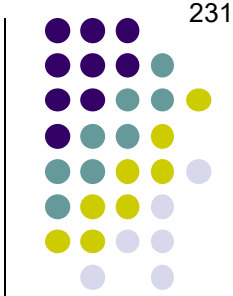

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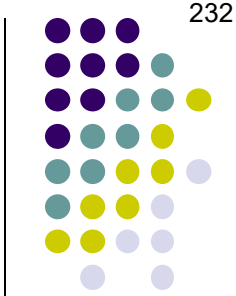

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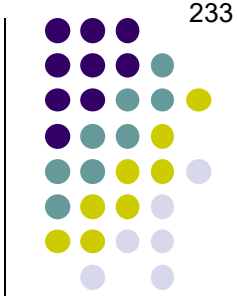

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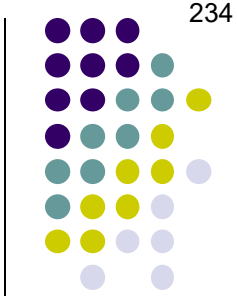

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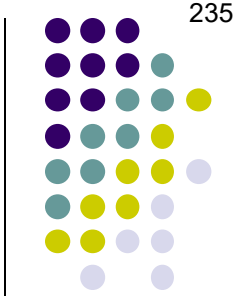

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What is the underlying pathophysiology?
Liquefaction of the cataract leads to lens proteins leaching across the capsule into the AC, where they prompt an inflammatory reaction; the protein + inflammatory cells clog the trabecular meshwork, leading to the IOP rise

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What will cytologic evaluation of an aqueous aspirate reveal? (This is another classic feature of phacolytic glaucoma.)

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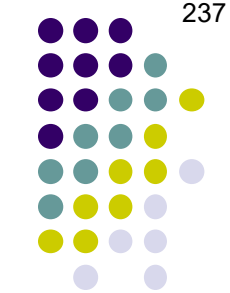

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Big fat macrophages loaded down with phagocytized lens proteins

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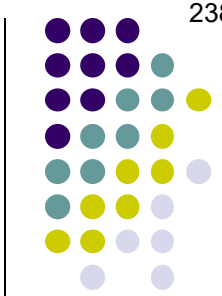

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Is phacomorphic glaucoma a form of open-*angle, or angle*-closure *glaucoma?*

--Secondary glaucoma

These are bilateral, but can be so asymmetric as to seem unilateral
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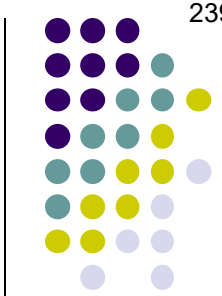

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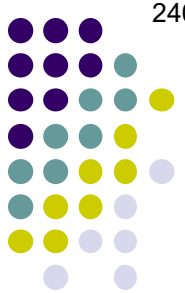

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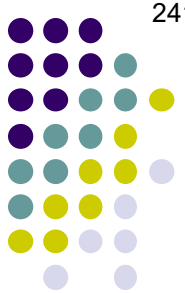

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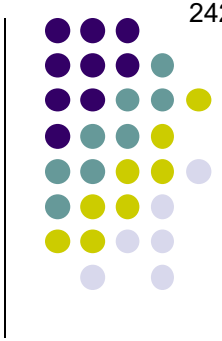

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2)

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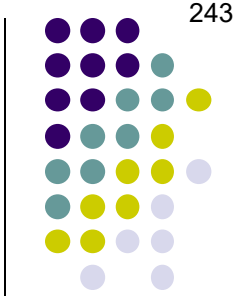

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How does cataractous increase in lens size lead to IOP elevation?
1) It alters the anatomic relationship between the anterior lens surface and the pupil margin in a manner that leads to pupillary block and subsequent angle closure; and
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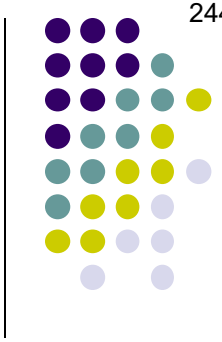


--Intraocular inflammation
- --Anterior uveitis
- --Trabeculitis
- --Fuchs heterochromic iridocyclitis
- --Posne

--Corneal endoth
- --PPMD
- --ICE

--Increased episc
- --CCF
- --SVC s
- --Sturge
- --Orbital
- --TED

Is phacomorphic glaucoma a form of open-*angle, or angle*-closure *glaucoma?*
Angle closure

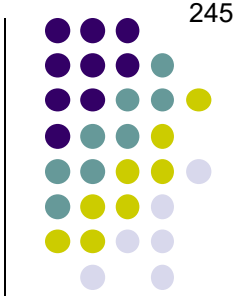
In phacolytic glaucoma, cataractous lens proteins in the AC are the culprit. What is the culprit in phacomorphic glaucoma?
Cataractous increase in lens **size**

How does cataractous increase in lens size lead to IOP elevation?
1) It alters the anatomic relationship between the anterior lens surface and the pupil margin in a manner that leads to pupillary block and subsequent angle closure; and
2) it pushes the peripheral iris forward, narrowing the angle, thereby reducing the magnitude of the PC-AC pressure gradient needed to induce angle closure

--Secondary glaucoma
- --Lens-related: Phacolytic, **phacomorphic**
- --PXS
- --PDS

These are bilateral, but can be so asymmetric as to seem unilateral

Unilateral ↑ IOP associated with:



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--Increased episcleral venous pressure
- --CCF
- --SVC syndrome
- --Sturge-Weber
- --Orbital inflammation
  - --cellulitis
  - --pseudotumor
  - --TED

--Secondary glaucoma
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What is the status of the lens capsule in these conditions?

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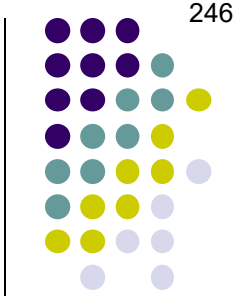

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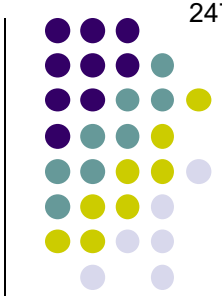
  - --TE

Phacolytic through intact capsule

--Secondary glaucoma
- **--Lens-related: Phacolytic, phacomorphic**
- --PXS
- --PDS

What is the status of the lens capsule in these conditions?
By definition, **intact**

Unilateral ↑ IOP associated with:



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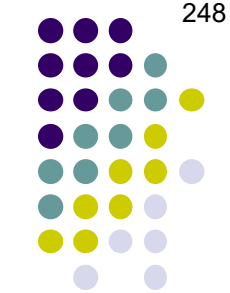
Phacolysis through intact capsule

--Secondary glaucoma
- --Lens-related: Phacolytic, phacomorphic
- --PXS
- --PDS

*What lens condition associated with uveitis has, by definition, a capsule that **has** been traumatically or surgically breached?*

What is the status of the lens capsule in these conditions?
By definition, **intact**

Unilateral ↑ IOP associated with:



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--Secondary glaucoma
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- --PXS
- --PDS

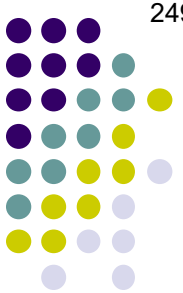
Phacolysis through intact capsule

Phacoantigen not intact capsule

*What lens condition associated with uveitis has, by definition, a capsule that **has** been traumatically or surgically breached?*
Phacoantigenic uveitis

What is the status of the lens capsule in these conditions?
By definition, **intact**

Unilateral ↑ IOP associated with:



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--Secondary glaucoma
- --Lens-rela
- **--PXS**
- **--PDS**

PXS and PDS are compared and contrasted in detail in slide-set G4

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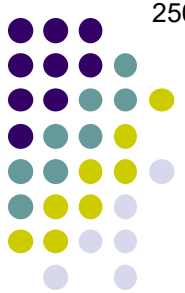

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There are **many** *other causes of secondary glaucoma—see both* G13 *(2ndry* ***open****-angle glaucoma) and* G16 *(2ndry angle-****closure*** *glaucoma)*

- --TED

--Secondary glaucoma
- --Lens-related: Phacolytic, phacomorphic
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