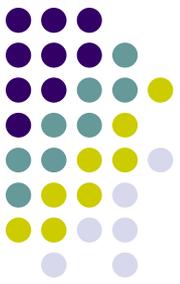


Q

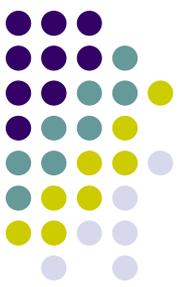
Cataracts Associated with Trauma or Radiation



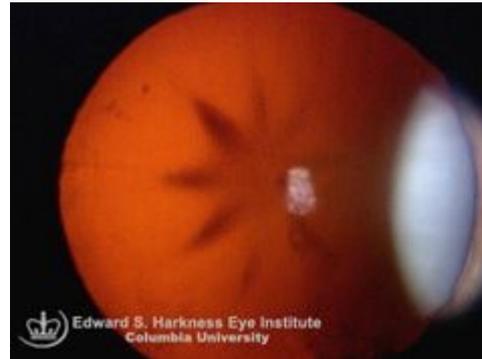
- Cataracts associated with blunt trauma are often or initially

A

Cataracts Associated with Trauma or Radiation

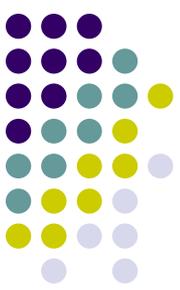


- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially

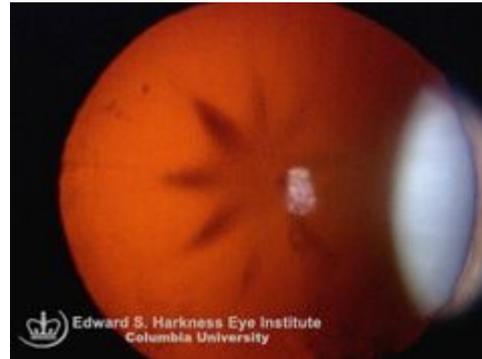


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Cataracts Associated with Trauma or Radiation

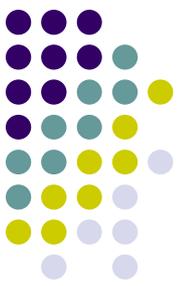


- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to

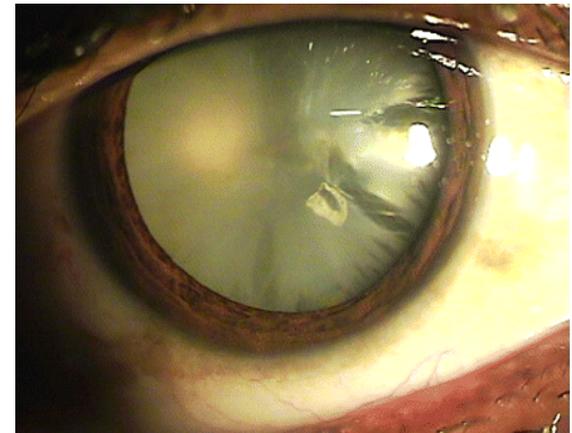
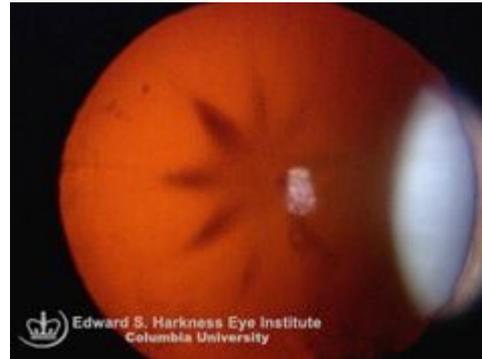


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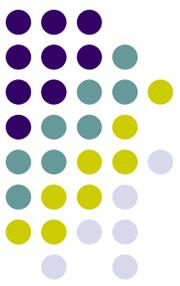


- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**



Q

Cataracts Associated with Trauma or Radiation

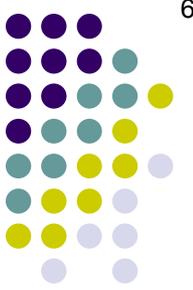


- **Cataracts associated with blunt trauma** are often **stellate** or **rosette** initially, but may progress to **total opacification**

Can blunt-trauma-induced cataract resolve spontaneously?

A

Cataracts Associated with Trauma or Radiation



- **Cataracts associated with blunt trauma** are often **stellate** or **rosette** initially, but may progress to **total opacification**

Can blunt-trauma-induced cataract resolve spontaneously?
It can—albeit only rarely, and only if the trauma was mild

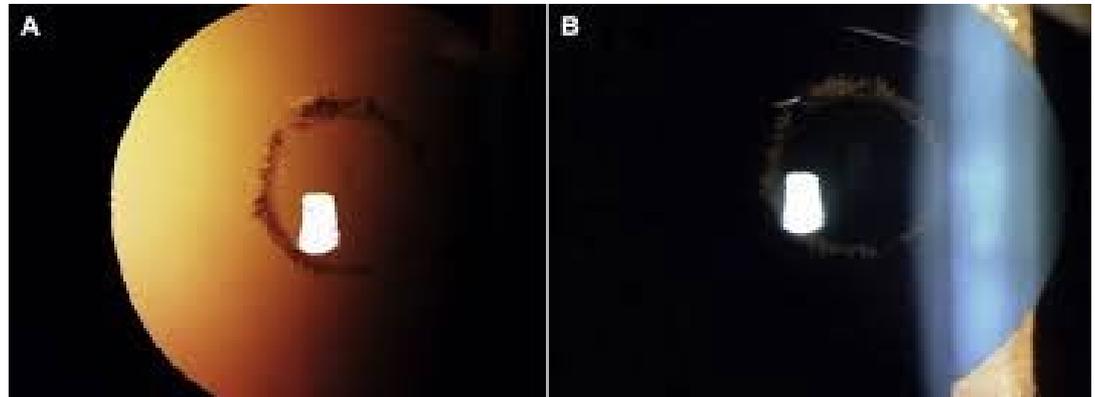
Q

Cataracts Associated with Trauma or Radiation



- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**
- What is the eponym for the ring of pupillary-ruff pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

(tennis ball vs eye) in
A, retroillumination,
and B, direct



Q/A

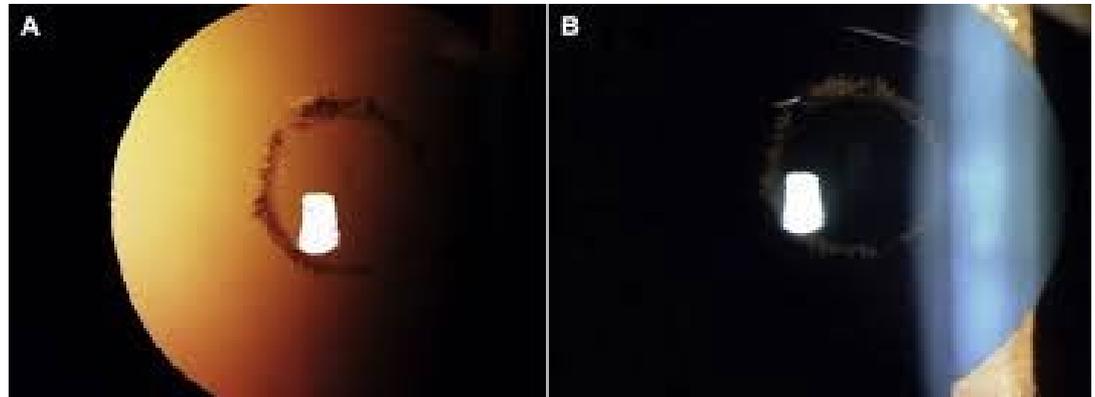
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A eponym *ring*

ring
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A

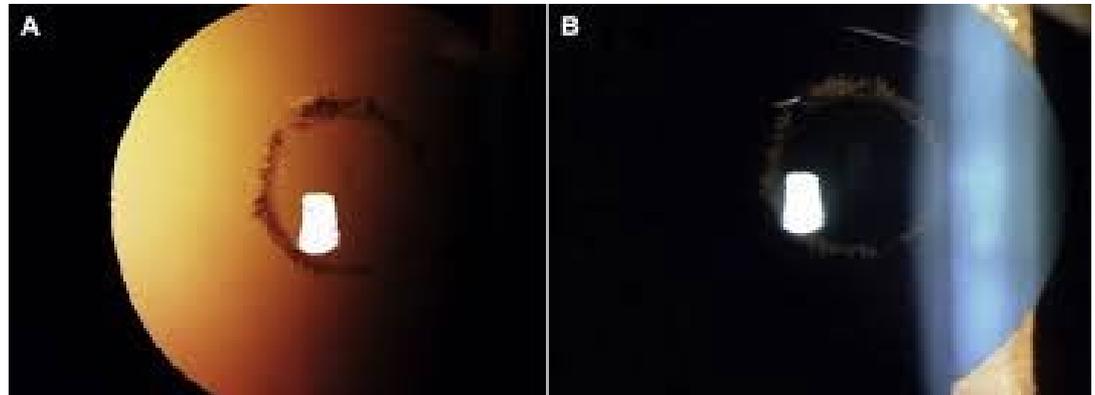
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A **Vossius** ring

Vossius ring
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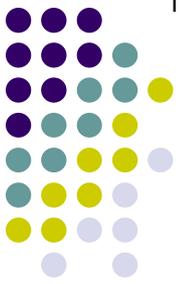
Q

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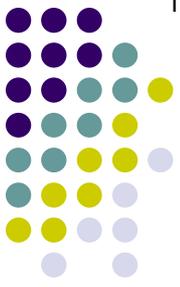
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Why is that?



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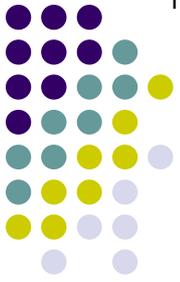
No. But while not visually significant, it is most assuredly **clinically** significant.

Why is that?

Because it signifies that the eye in question has experienced significant trauma, and thus is at much greater risk for intra- and post-CE complications

Q

Cataracts Associated with Trauma or Radiation

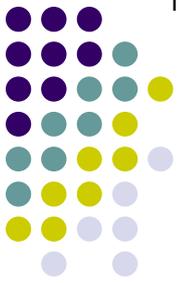


- Cataracts associated with **blunt trauma** are

In addition to cataract formation, what other serious lens-related sequelae often follows blunt trauma to the eye?

A

Cataracts Associated with Trauma or Radiation

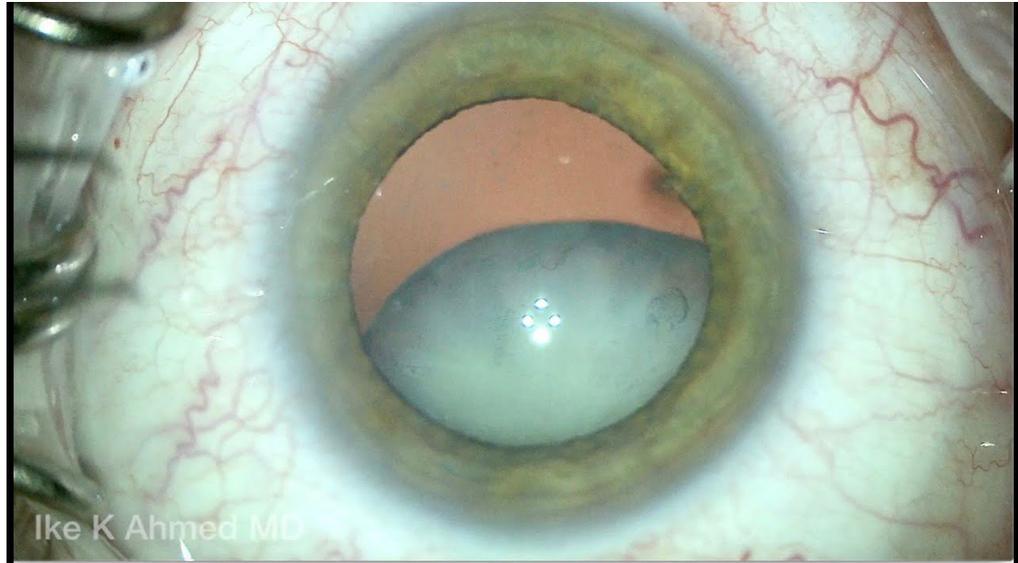
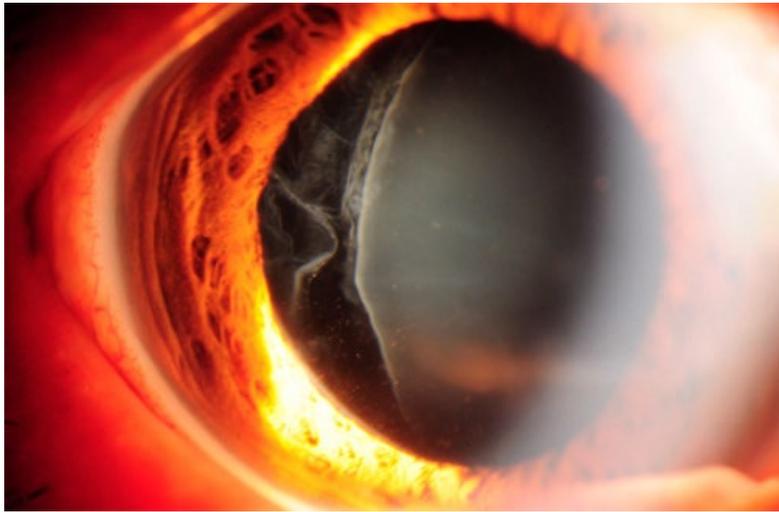


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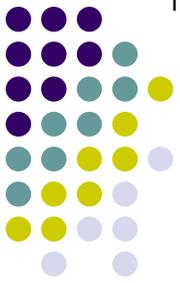
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Lens subluxation or dislocation

Cataracts Associated with Trauma or Radiation



Traumatic cataract with subluxation



Q

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Other than visible displacement from its proper location, what lens-related sign is very worrisome for zonular disruption secondary to trauma?



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Phacodonesis



Q

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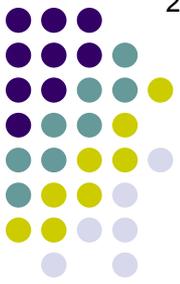
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To what does the term phacodonesis refer?



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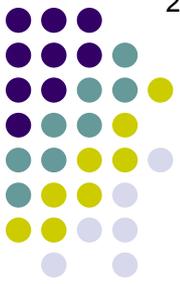
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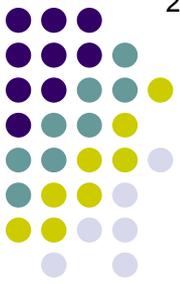
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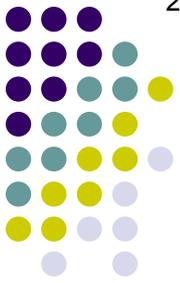
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What is the well la-dee-da, aren't you a gunner? term for displacement of the lens from its normal anatomic position (ie, lens subluxation/dislocation)?

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Ectopia lentis

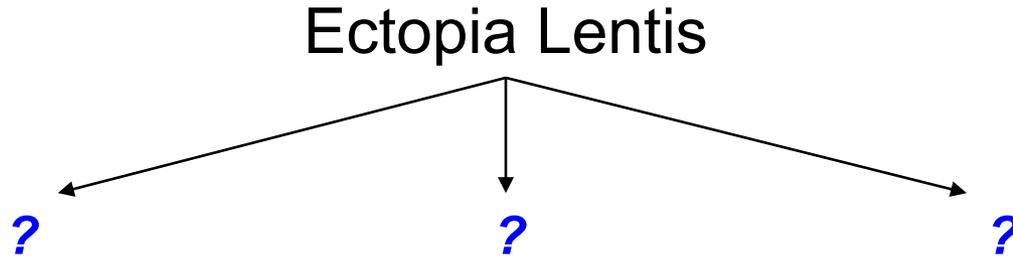
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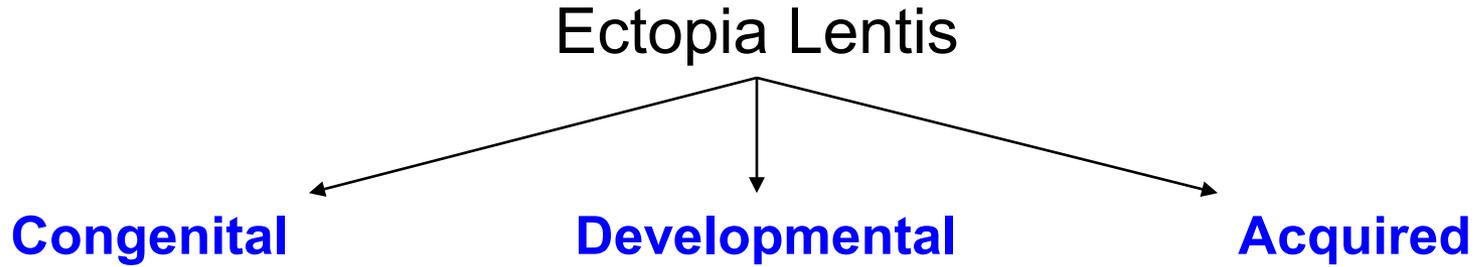
Cataracts Associated with Trauma or Radiation



The BCSC series divides ectopia lentis into three categories:

A

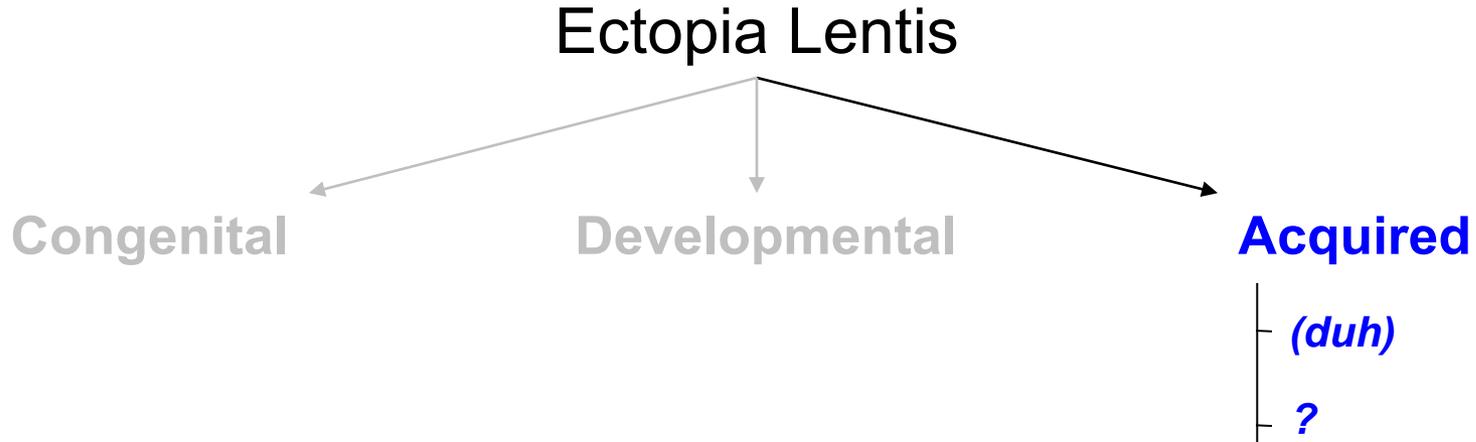
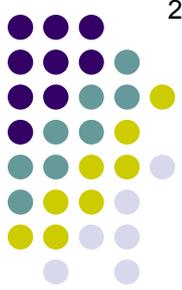
Cataracts Associated with Trauma or Radiation



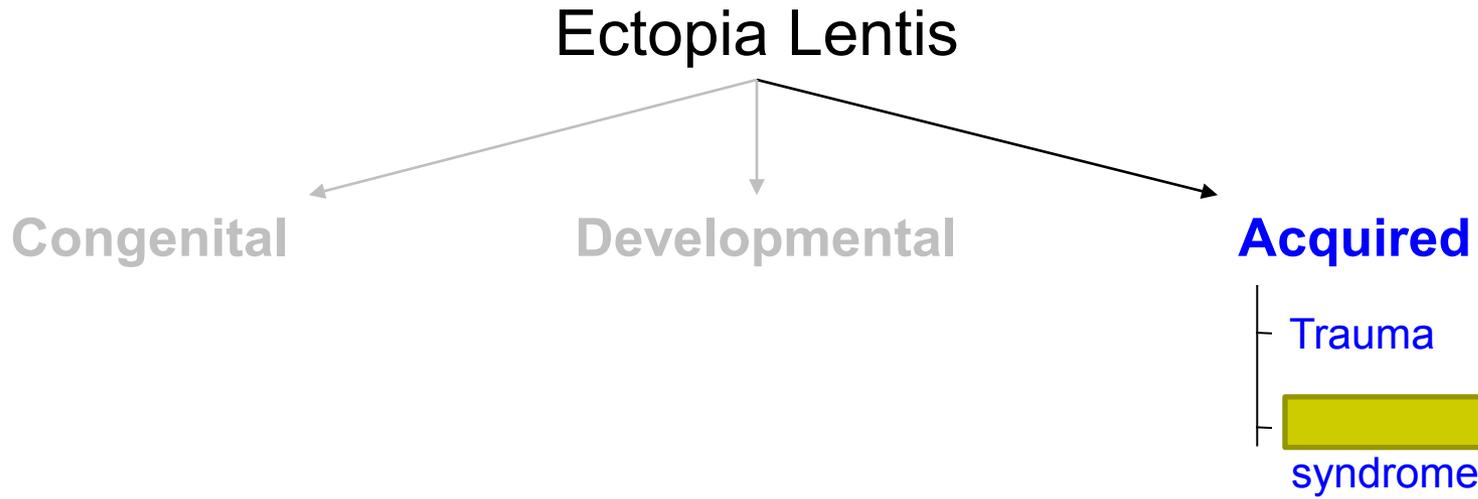
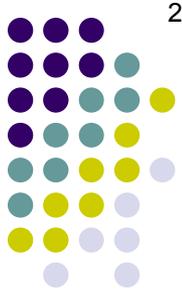
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Cataracts Associated with Trauma or Radiation



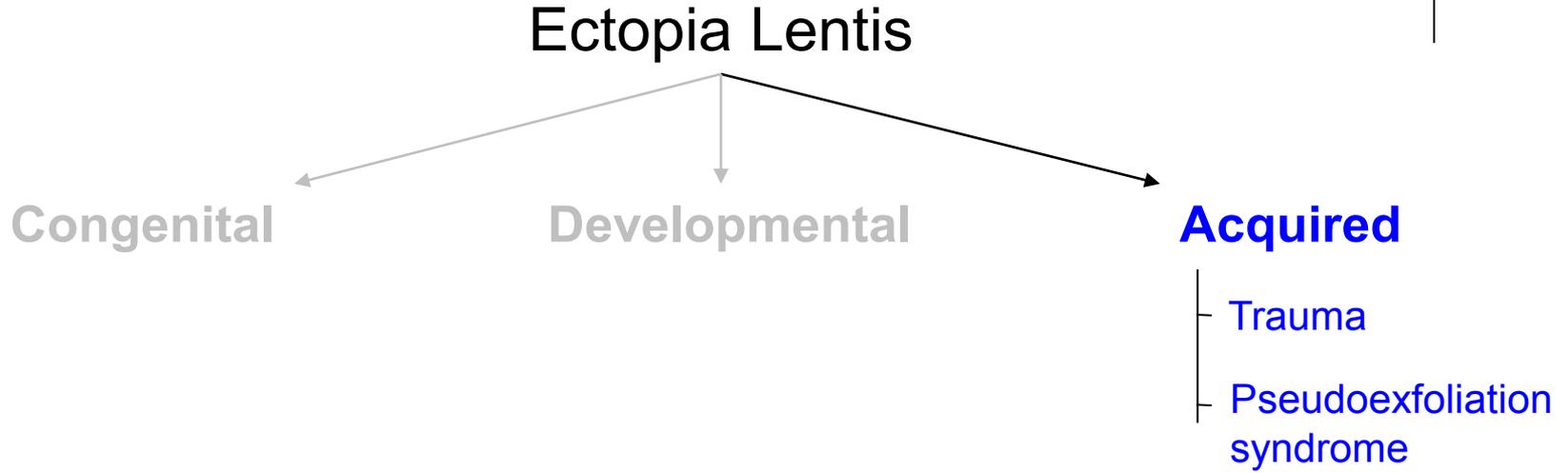
What are the two **acquired** causes covered in the BCSC?



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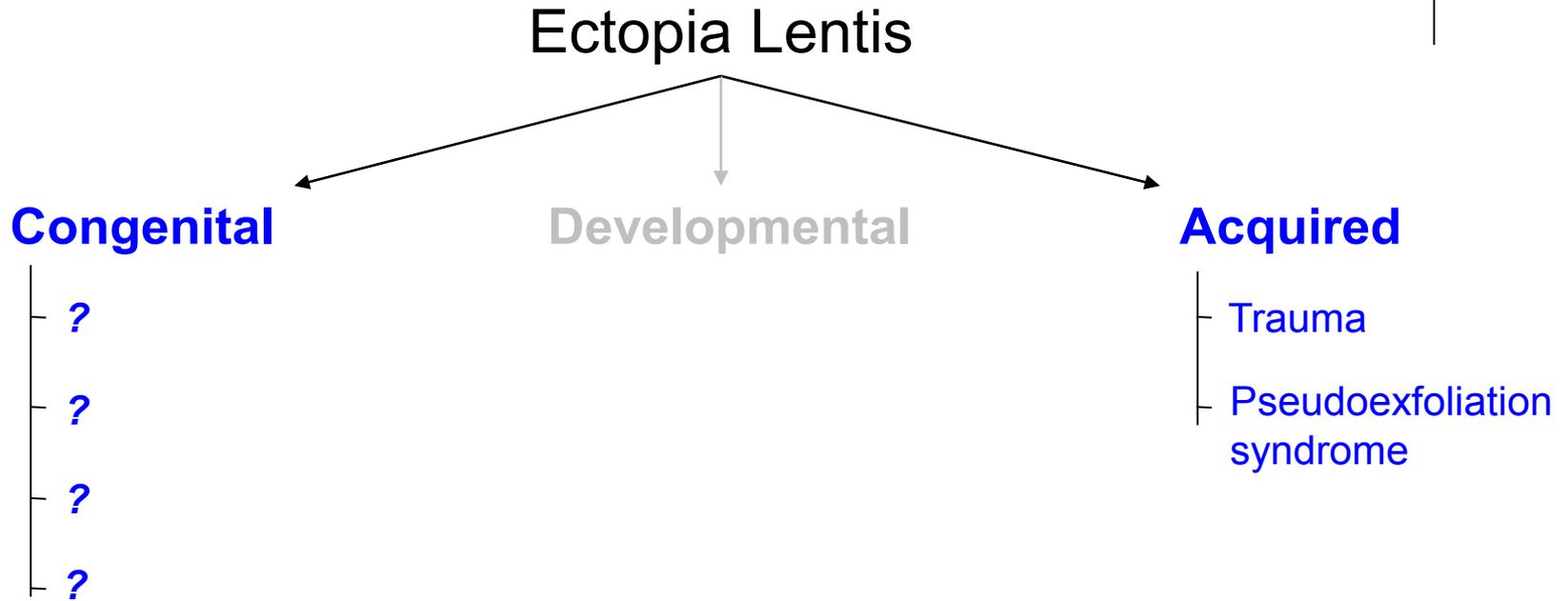
Cataracts Associated with Trauma or Radiation



*What are the two **acquired** causes covered in the BCSC?*

Q

Cataracts Associated with Trauma or Radiation



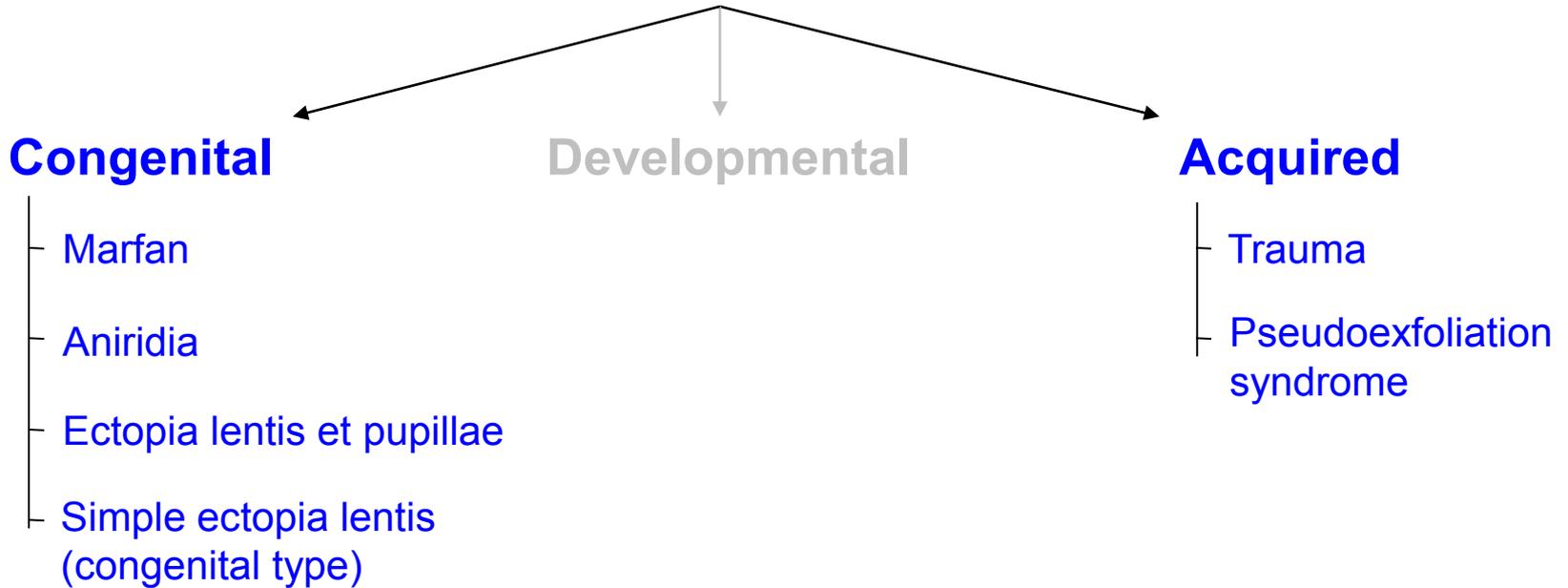
What are the four **congenital** causes covered in the BCSC?

A

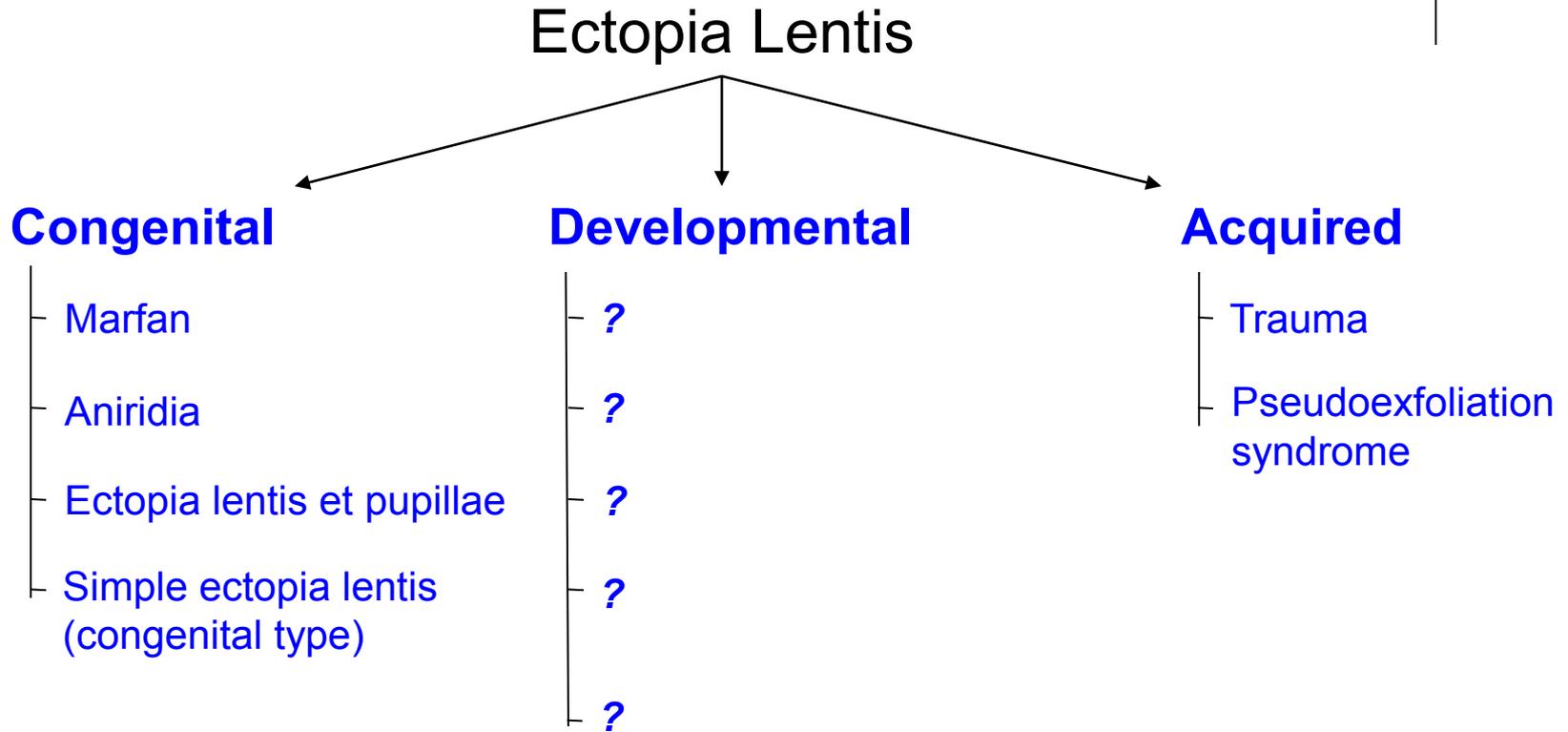
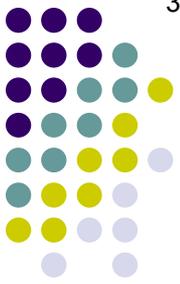
Cataracts Associated with Trauma or Radiation



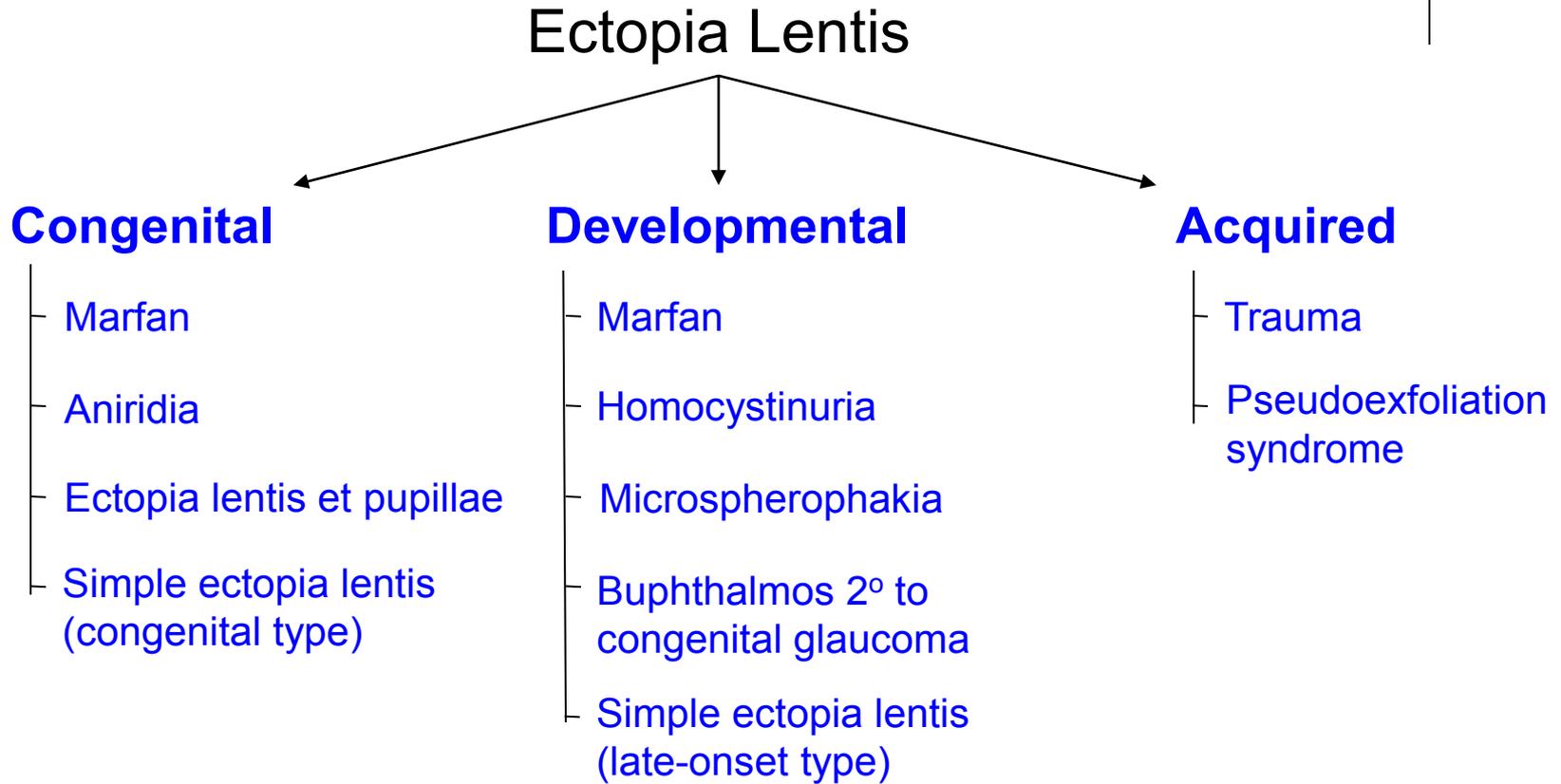
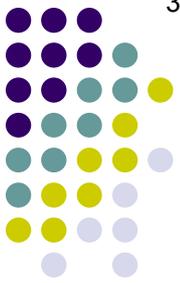
Ectopia Lentis



What are the four **congenital** causes covered in the BCSC?



*What are the five **developmental** causes covered in the BCSC?*

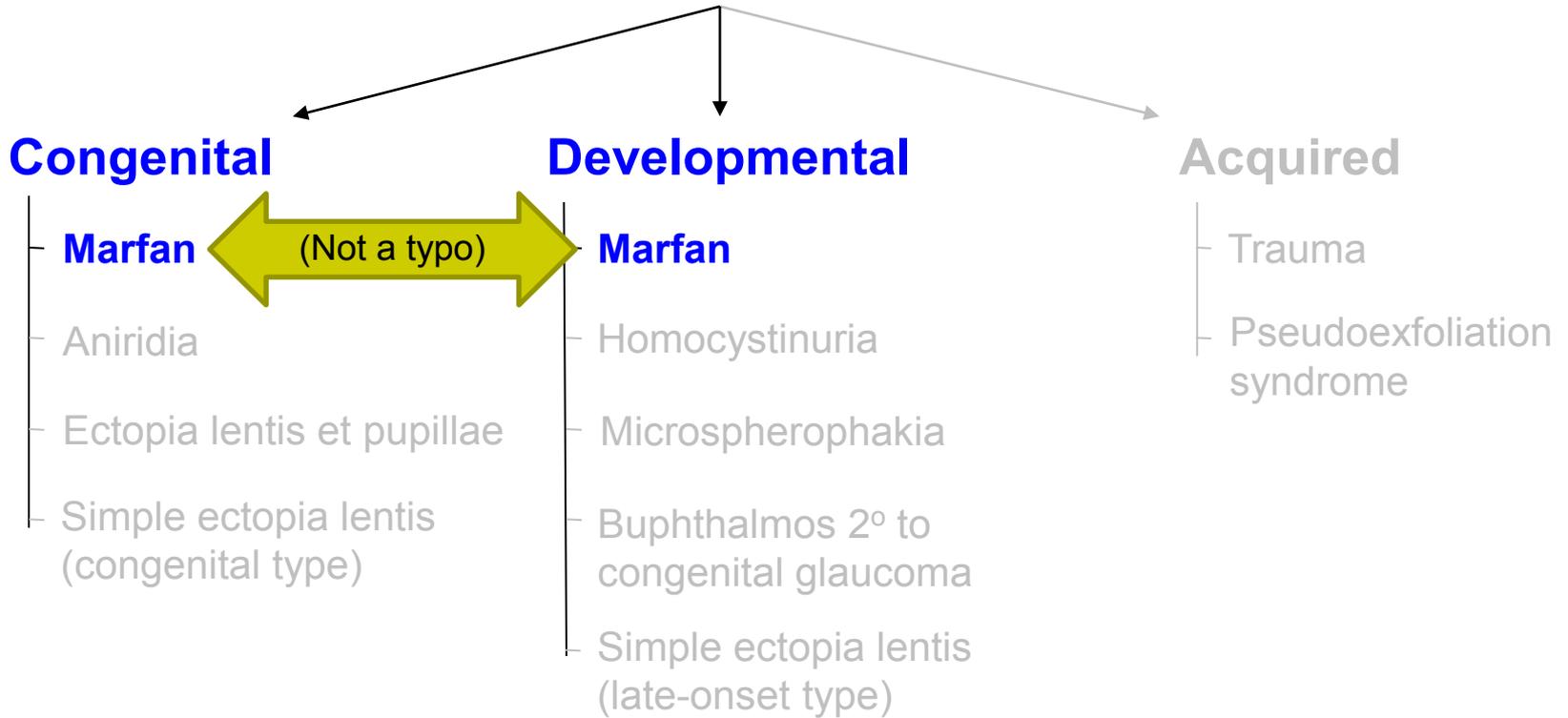


*What are the five **developmental** causes covered in the BCSC?*

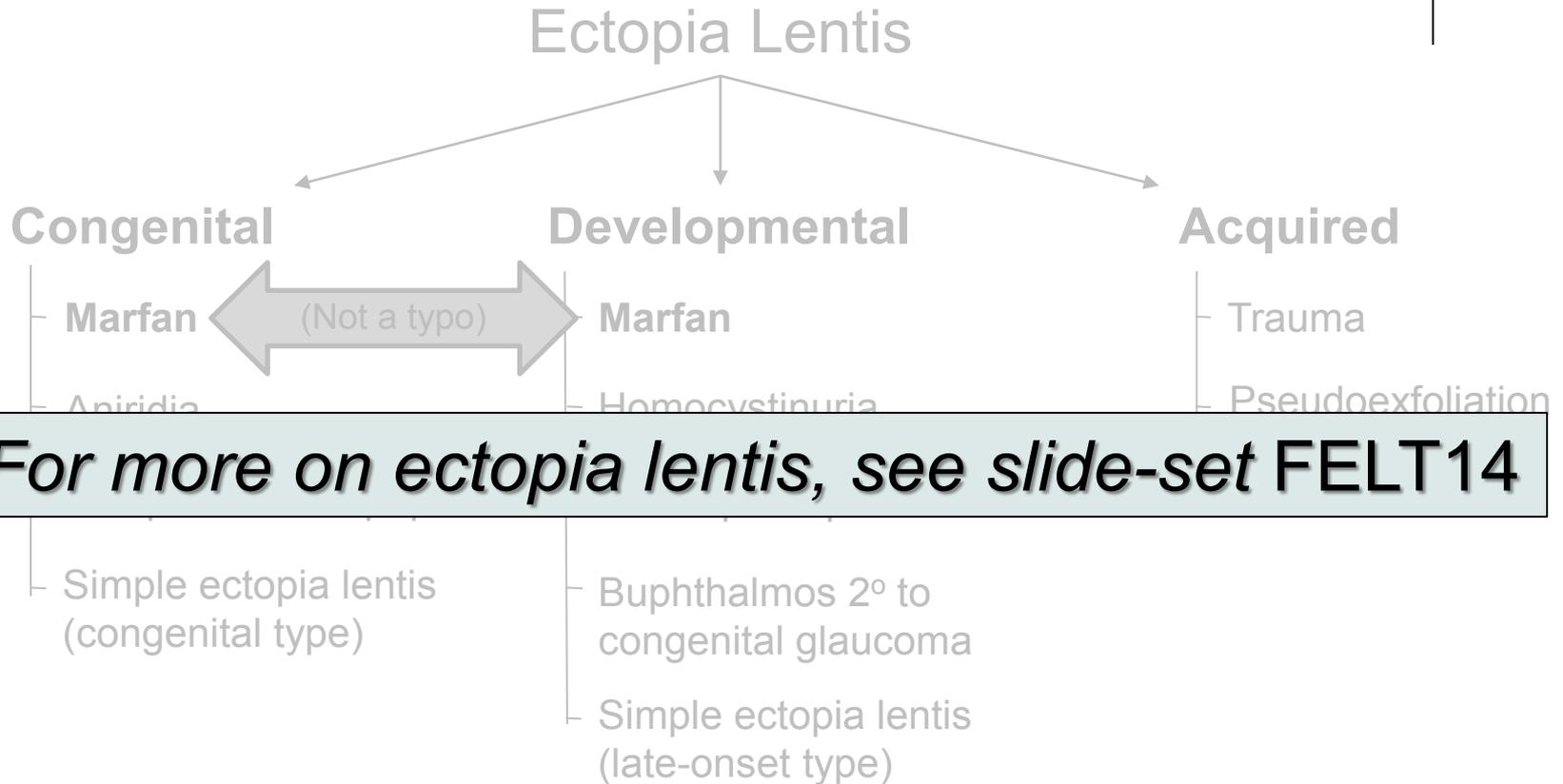
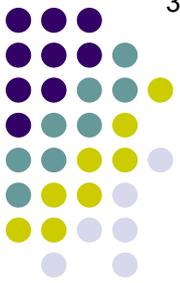
Cataracts Associated with Trauma or Radiation



Ectopia Lentis



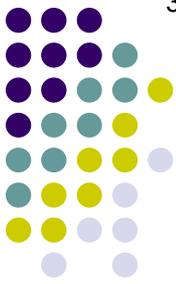
Cataracts Associated with Trauma or Radiation



Q

Cataracts Associated with Trauma or Radiation

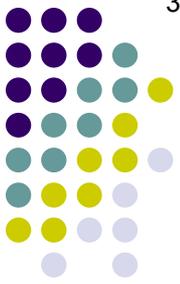
- Is exposure to radiation associated with cataract formation?

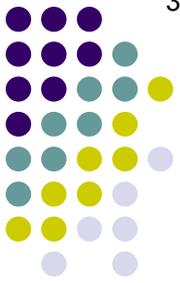


A

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? **Yes**





Q

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? **Yes**
- Which of the following forms of radiation cause cataracts?

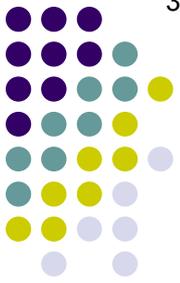
Ionizing:

Charged particle:

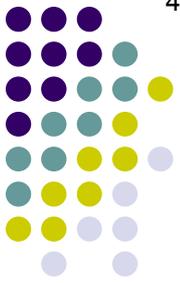
Infrared:

UV:

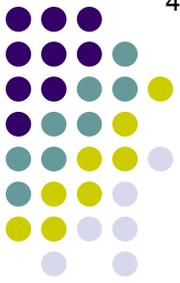
Microwave:



- Is exposure to radiation associated with cataract formation? **Yes**
- Which of the following forms of radiation cause cataracts?
 - Ionizing: **Most definitely**
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 - Infrared:
 - UV:
 - Microwave:



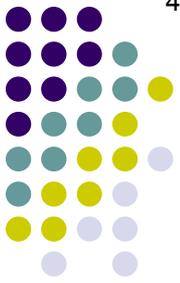
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 - UV:
 - Microwave:

Q/A

Cataracts Associated with Trauma or Radiation



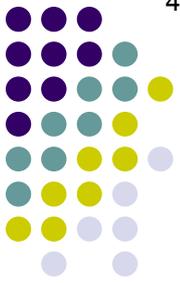
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A

Cataracts Associated with Trauma or Radiation

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 - Microwave: **Eh**



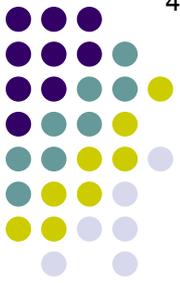
Q

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Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?



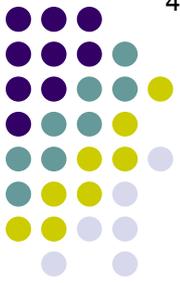
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In what situation is one most likely to be exposed to ionizing radiation?
During an X-ray



Q

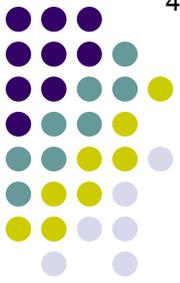
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In what situation is *You mean one XR can cause a cataract?!*

During an X-ray



A

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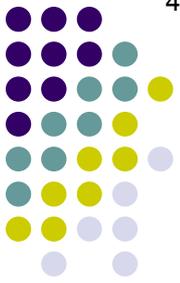
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You mean one XR can cause a cataract?!

Not hardly, no



Q

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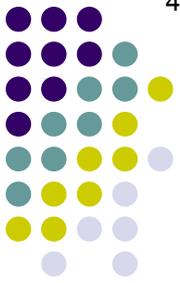
In what situation is

During an X-ray

You mean one XR can cause a cataract?!

Not hardly, no

OK then, give me some perspective—how many CXR's worth of ionizing radiation would it take to cause a cataract?



A

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Ionizing: Most definitely

In what situation is

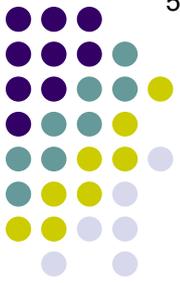
During an X-ray

You mean one XR can cause a cataract?!

Not hardly, no

OK then, give me some perspective—how many CXR's worth of ionizing radiation would it take to cause a cataract?

About 200 (at least)



Q

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?

During an X-ray

How sensitive is the lens to ionizing radiation?



A

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

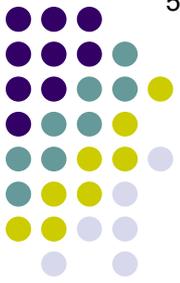
Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?

During an X-ray

How sensitive is the lens to ionizing radiation?

Extremely so, probably more so than the other forms of radiation



Q

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?

During an X-ray

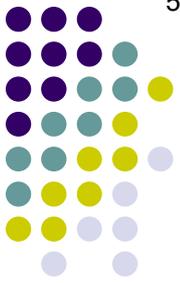
How sensitive is the lens to ionizing radiation?

Extremely so, probably more so than the other forms of radiation

What is the temporal relationship between exposure to ionizing radiation and subsequent cataract development?

Q/A

Cataracts Associated with Trauma or Radiation



- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?

During an X-ray

How sensitive is the lens to ionizing radiation?

Extremely so, probably more so than the other forms of radiation

What is the temporal relationship between exposure to ionizing radiation and subsequent cataract development?

Delays of up to 20 d/w/m/yr would not be unusual



A

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

In what situation is one most likely to be exposed to ionizing radiation?

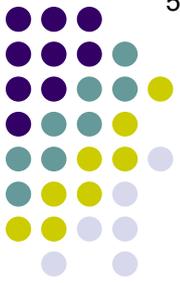
During an X-ray

How sensitive is the lens to ionizing radiation?

Extremely so, probably more so than the other forms of radiation

What is the temporal relationship between exposure to ionizing radiation and subsequent cataract development?

Delays of up to 20 years would not be unusual



Q

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

Charged particle: Yes

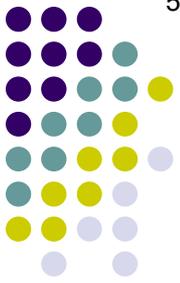
In what situation is the lens most likely to be exposed to charged-particle radiation?

UV: Maybe

Microwave: Eh

Q/A

Cataracts Associated with Trauma or Radiation



- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

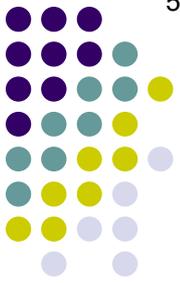
Ionizing: Most definitely

Charged particle: Yes

In what situation is the lens most likely to be exposed to charged-particle radiation?
During treatment for a

UV: Maybe

Microwave: Eh



A

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

Charged particle: Yes

In what situation is the lens most likely to be exposed to charged-particle radiation?
During treatment for a choroidal melanoma

UV: Maybe

Microwave: Eh

Q

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

A

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

By what occupation-related name is this sort of cataract known?

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Ionizing: Most definitely

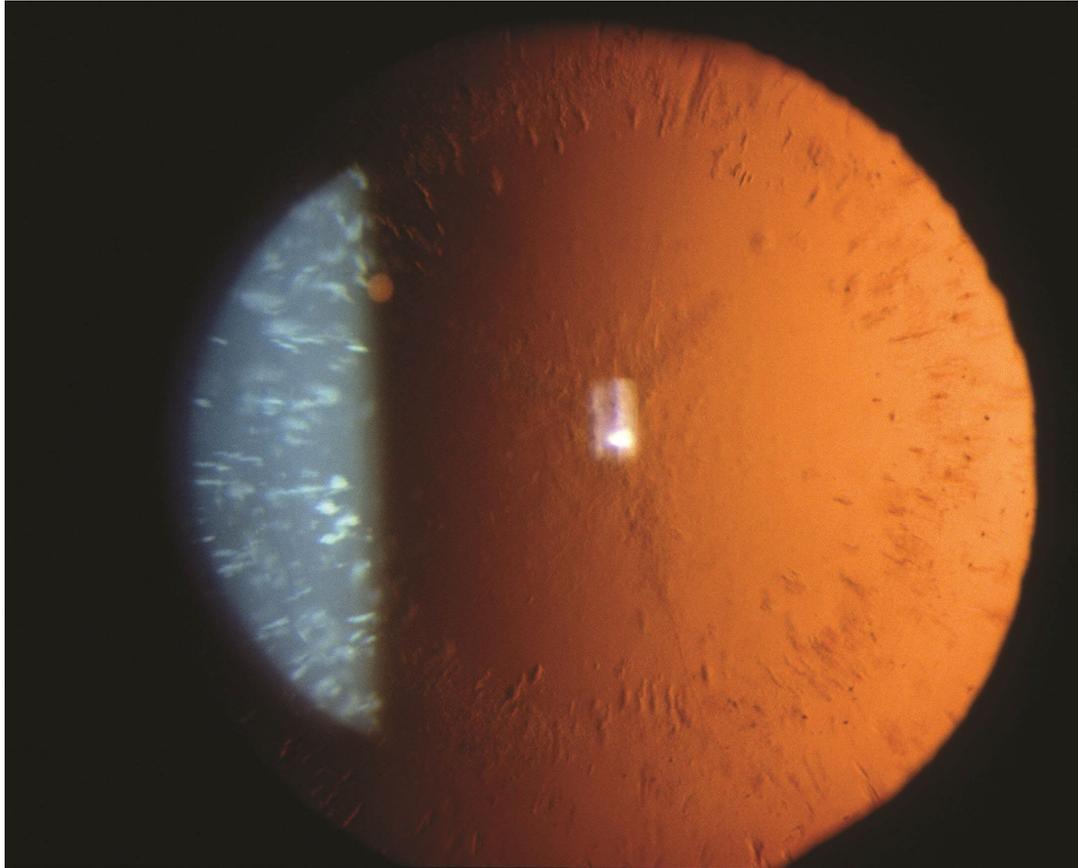
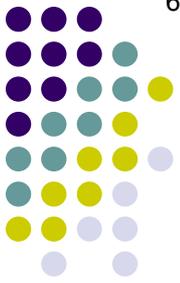
Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

Cataracts Associated with Trauma or Radiation



Glassblower's cataract

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

By what occupation-related
'Glassblower's cataract'

*What sort of cataract (ie, nuclear; cortical; etc)
is a glassblower's cataract?*

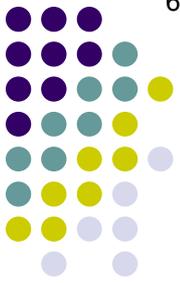
Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh



A

Cataracts Associated with Trauma or Radiation

*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

By what occupation-related
'Glassblower's cataract'

*What sort of cataract (ie, nuclear; cortical; etc)
is a glassblower's cataract?*
Cortical

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

Q

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

Ionizing: Most definitely

Charged particle: Yes

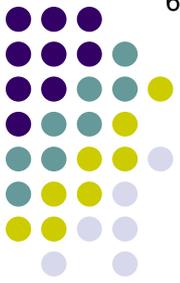
Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause the outer layer of the anterior capsule to peel in a scroll-like manner

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

*It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner***

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

What is the name for this process?

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner**

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

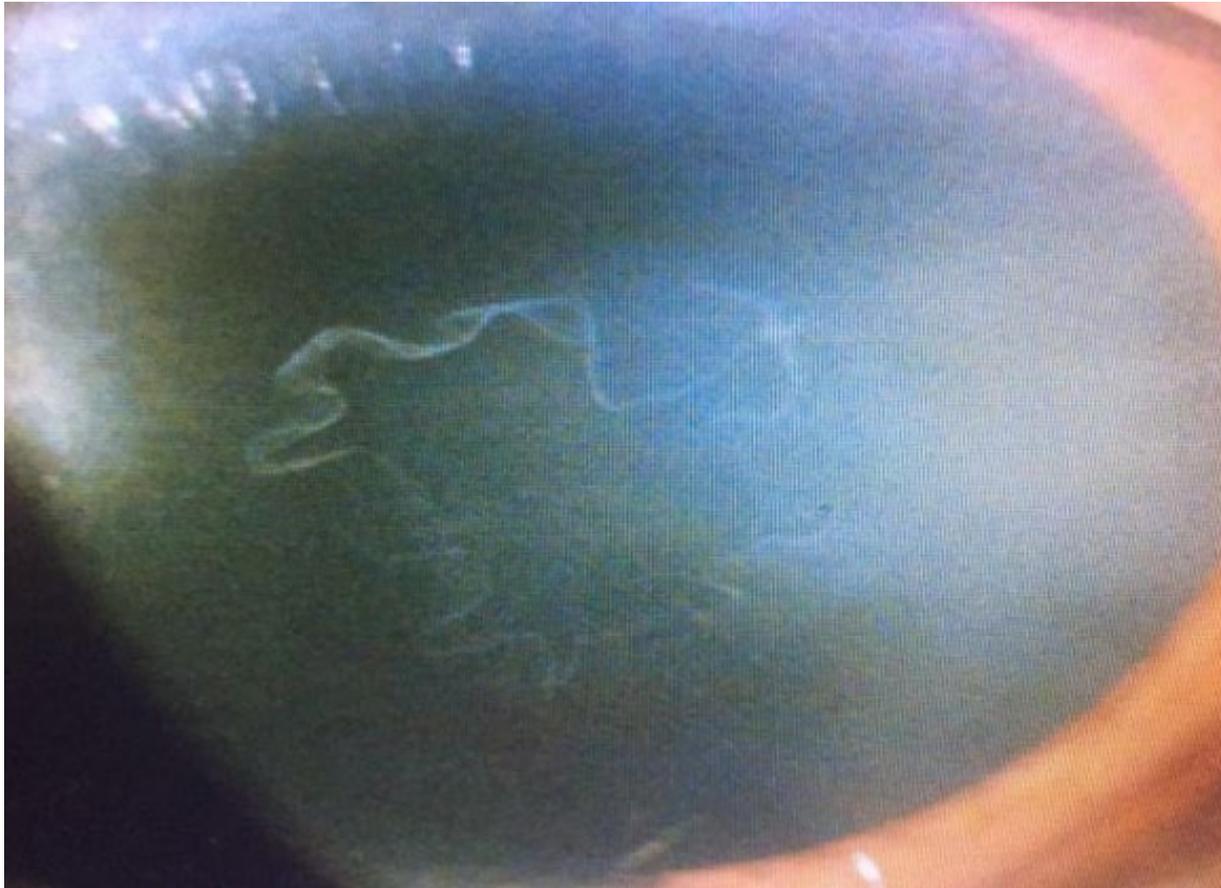
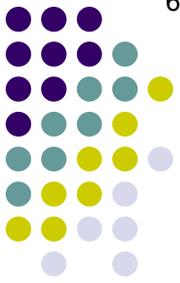
UV: Maybe

Microwave: Eh

What is the name for this process?

'Exfoliation'

Cataracts Associated with Trauma or Radiation



Exfoliation

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner**

Ionizing: Most definitely

Charged particle: Yes

What is the name for this process?

'Exfoliation'

'Exfoliation'? Isn't it called pseudoexfoliation?

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner**

Ionizing: Most definitely

Charged particle: Yes

What is the name for this process?

'Exfoliation'

'Exfoliation'? Isn't it called **pseudoexfoliation**?

While they share some superficial similarities vis a vis appearance, *pseudoexfoliation* (syndrome, PXS) is a different, unrelated condition

Q

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner**

Ionizing: Most definitely

Charged particle: Yes

What is the name for this process?

'Exfoliation'

'Exfoliation'? Isn't it called **pseudoexfoliation**?

While they share some superficial similarities vis a vis appearance, *pseudoexfoliation* (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does **not** result from a process intrinsic to the capsule itself; rather, this material is created elsewhere and *deposits* on the capsule surface (one of a number of intraocular locations on which deposits occur).

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?

If one works in a foundry

By what occupation-related name is this sort of cataract known?

'Glassblower's cataract'

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause **the outer layer of the anterior capsule to peel in a scroll-like manner**

Ionizing: Most definitely

Charged particle: Yes

What is the name for this process?

'Exfoliation'

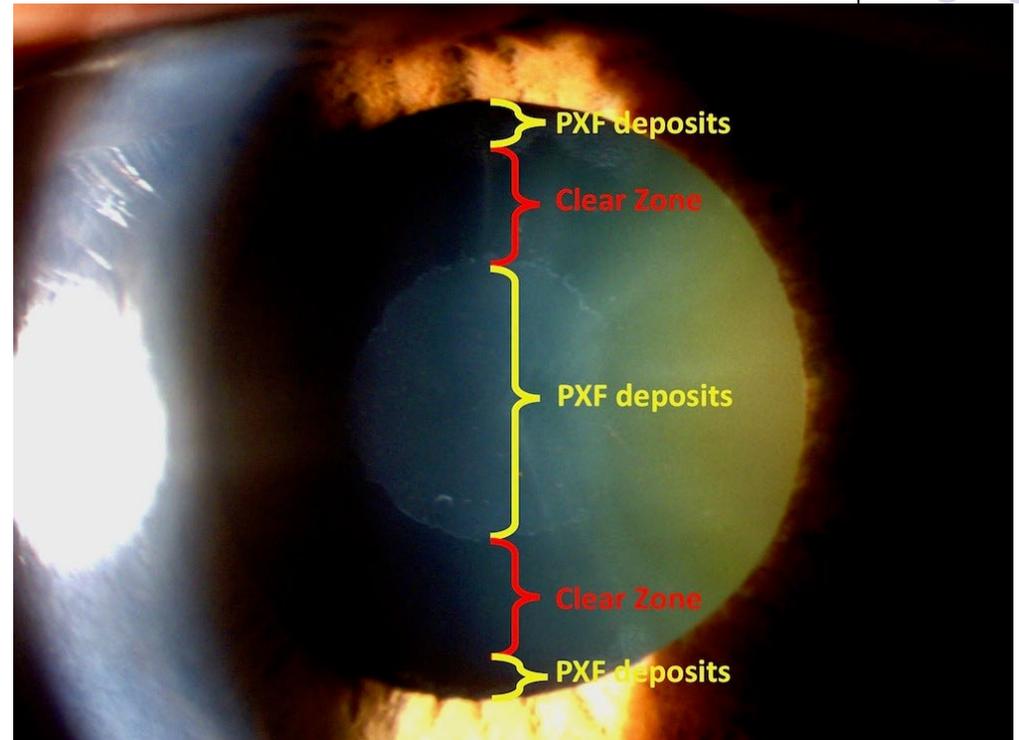
'Exfoliation'? Isn't it called **pseudoexfoliation**?

While they share some superficial similarities vis a vis appearance, *pseudoexfoliation* (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does **not** result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and *deposits* on the capsule surface (one of a number of intraocular locations on which deposits occur).

Cataracts Associated with Trauma or Radiation



The exfoliation pic from a few slides ago



Pseudoexfoliation (syndrome). Fibrillar material deposits on the lens' capsule, where normal dilatory/constrictive pupil movements wipe some off to produce a material-free clear zone, resulting in the classic 'target' appearance.

Exfoliation vs pseudoexfoliation

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause a scroll-like appearance of the lens in a scroll-like manner

Is PXS associated with an increased risk of cataract a la exfoliation and glassblower's cataract?

What is the mechanism for this process?

'Exfoliation'

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS

A

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause pseudoexfoliation (PXS) in a scroll-like manner

Is PXS associated with an increased risk of cataract a la exfoliation and glassblower's cataract?

Yes (although the cataract isn't necessarily cortical in type)

What is the mechanism for this process?

'Exfoliation'

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

Is PXS associated with an increased risk of cataract a lamellar cataract or a scroll-like manner

Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

What is the mechanism for this process?

'Exfoliation'

While they share some superficial similarities via a visual appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause a scroll-like appearance in a scroll-like manner

Is PXS associated with an increased risk of cataract a lamellar exfoliation and glassblower's cataract?

Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of

'Exfoliation'

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS

A

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

It can cause a scroll-like change in a scroll-like manner

Is PXS associated with an increased risk of cataract a lamellar exfoliation and glassblower's cataract?

Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of glaucoma

'Exfoliation'

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS

Q

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

Is PXS associated with an increased risk of cataract a lamellar or cortical in a scroll-like manner?

Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of glaucoma, as well as intra- and post-op surgery complications

PXS

'Exfoliation' While they share some superficial similarities via a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

A

Cataracts Associated with Trauma or Radiation



*In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry*

*By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'*

Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?

Is PXS associated with an increased risk of cataract a lamellar cataract or a scroll-like manner?

Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of glaucoma, as well as intra- and post-op cataract surgery complications

'Exfoliation'

While they share some superficial similarities via a visual appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

PXS

Q

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry

By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'

Prior to the intense infrared radiation, the lens is exposed to intense infrared radiation in a scroll-like manner

Are they at risk for open, or closed-angle glaucoma?

Yes, PXS pts are at increased risk of **glaucoma**, as well as intra- and post-op cataract surgery complications

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In **PXS**, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry

By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'

Prior to the intense infrared radiation, the lens is in a scroll-like manner

Are they at risk for open, or closed-angle glaucoma?

Open

Yes, PXS pts are at increased risk of **glaucoma**, as well as intra- and post-op cataract surgery complications

While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In **PXS**, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

Q

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry

By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'

Prior to the intense infrared radiation exposure, the lens is normal. It can cause cataracts in a scroll-like manner.

Are they at risk for open, or closed-angle glaucoma?
Open

Is it primary OAG (POAG), or 2ndry OAG?

Yes, PXS pts are at increased risk of glaucoma, as well as intra- and post-op cataract surgery complications. While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

A

Cataracts Associated with Trauma or Radiation



In what situation is one most likely to be exposed to infrared radiation?
If one works in a foundry

By what occupation-related name is this sort of cataract known?
'Glassblower's cataract'

Prior to the intense infrared radiation, the lens is exposed to intense infrared radiation in a scroll-like manner

Are they at risk for open, or closed-angle glaucoma?

Open

Is it primary OAG (POAG), or 2ndry OAG?

2ndry of course—by definition, POAG has no associations of this sort (that's what it means for a condition to be 'primary')

Yes, PXS pts are at increased risk of **glaucoma**, as well as intra- and post-op cataract surgery complications

'Exfoliation syndrome' (PXS) is a different, unrelated condition. In PXS, the material on the anterior capsule does not result from a process intrinsic to the capsule itself; rather, this fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).



Q

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

What's with the 'Yeah, but...?'



A

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

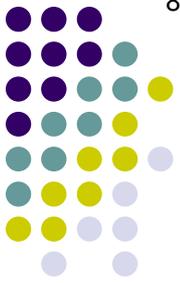
Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

*What's with the 'Yeah, but...'?
This sort of cataract has become quite rare (to put it mildly)*



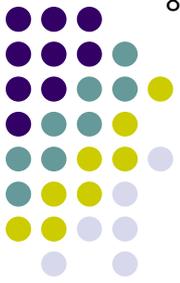
Q

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

In what situation is one most likely to be exposed to UV radiation?

UV: Maybe

Microwave: Eh



A

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

UV: Maybe

Microwave: Eh



Q

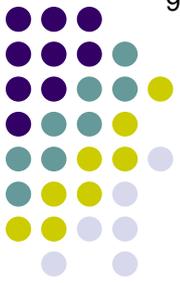
- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

*In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime*

Other than becoming a vampire, what can be done to avoid exposing the lens to UV radiation?

UV: Maybe

Microwave: Eh



A

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

Other than becoming a vampire, what can be done to avoid exposing the lens to UV radiation?
Wear UV-blocking sunglasses, and/or a hat with a visor

UV: Maybe

Microwave: Eh



Q

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

Other than becoming a vampire, what can be done to avoid exposing the lens to UV radiation?
Wear UV-blocking sunglasses, and/or a hat with a visor

UV: Maybe

What's with the 'Maybe'?

Microwave: En



A

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

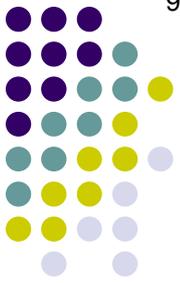
Other than becoming a vampire, what can be done to avoid exposing the lens to UV radiation?
Wear UV-blocking sunglasses, and/or a hat with a visor

UV: Maybe

Microwave: En

What's with the 'Maybe'?

It's estimated that UV radiation only accounts for about 10% of the risk for developing a cataract



Q

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

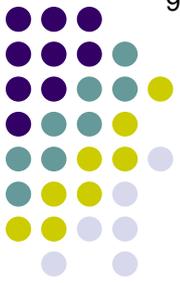
Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

What's with the 'Eh'?



A

- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

What's with the 'Eh'?

While microwaves have been demonstrated to cause cataracts in animal models, the evidence of an effect on humans is far from conclusive