

Q

Cataracts Associated with Trauma or Radiation



- Cataracts associated with blunt trauma are often type/configuration or type/configuration initially

A

Cataracts Associated with Trauma or Radiation



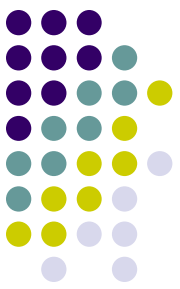
2

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



Q

Cataracts Associated with Trauma or Radiation



3

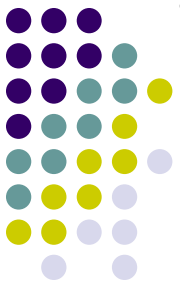
- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to

two words

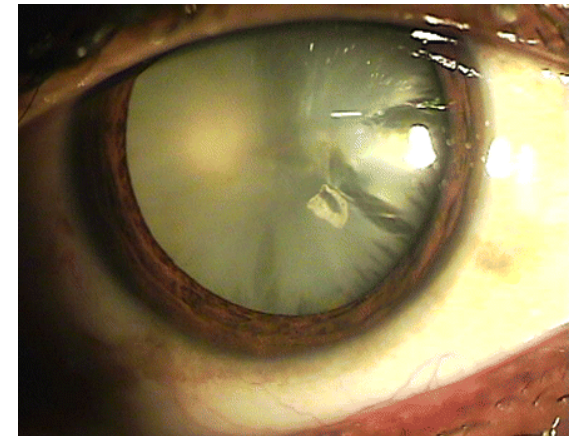
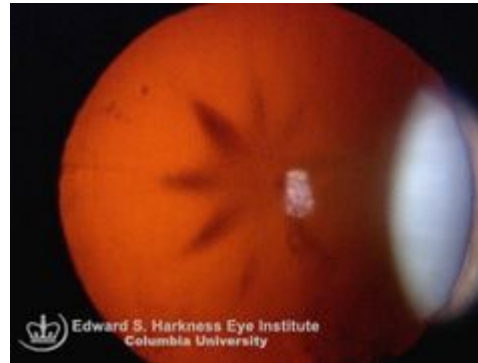


A

Cataracts Associated with Trauma or Radiation



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



Q

Cataracts Associated with Trauma or Radiation

5

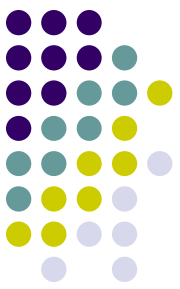


- **Cataracts associated with blunt trauma** are often **stellate** or **rosette** initially, but may progress to **total opacification**

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

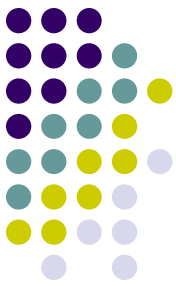
Cataracts Associated with Trauma or Radiation



- 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

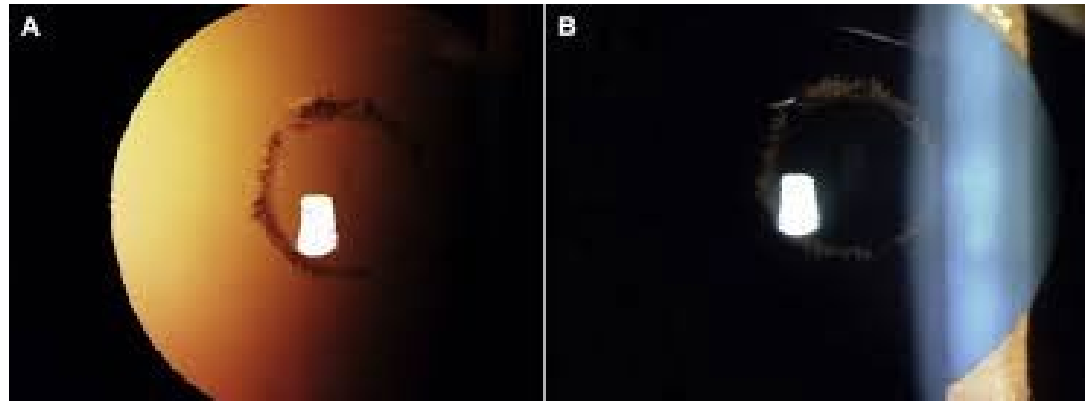




- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**
- What is the eponym for the ring of pupillary-ruff pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

A eponym *ring*

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



A

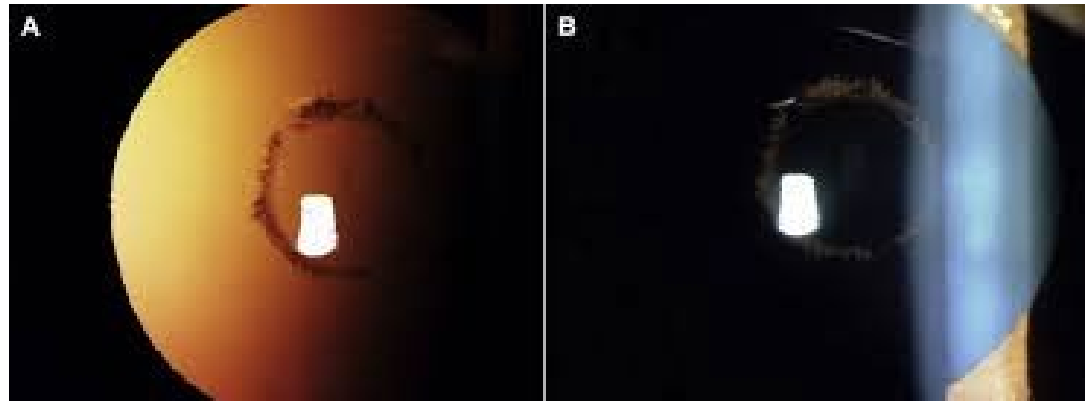
Cataracts Associated with Trauma or Radiation

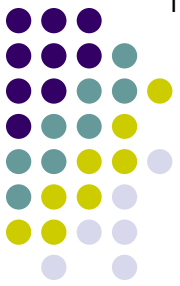


- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**
- What is the eponym for the ring of pupillary-ruff pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

A **Vossius** ring

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





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?

A **Vossius ring**

Is a Vossius ring visually significant in and of itself?

A

Cataracts Associated with Trauma or Radiation

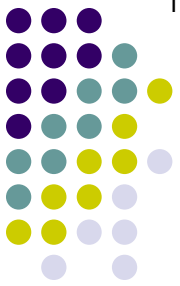


- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**
- What is the eponym for the ring of pupillary-ruff pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

A **Vossius ring**

Is a Vossius ring visually significant in and of itself?

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



Q

Cataracts Associated with Trauma or Radiation

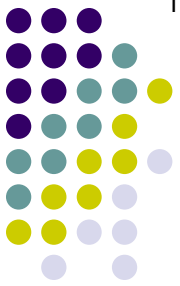
- Cataracts associated with blunt trauma are often **stellate** or **rosette** initially, but may progress to **total opacification**
- What is the eponym for the ring of pupillary-ruff pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

A **Vossius ring**

Is a Vossius ring visually significant in and of itself?

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

Why is that?



A

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?

A **Vossius ring**

Is a Vossius ring visually significant in and of itself?

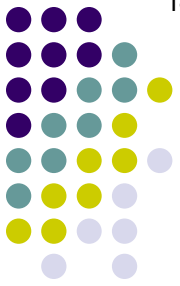
No. But while not visually significant, it is most assuredly **clinically** significant.

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

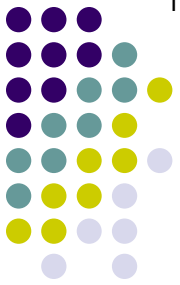


- Cataracts associated with **blunt trauma** are

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

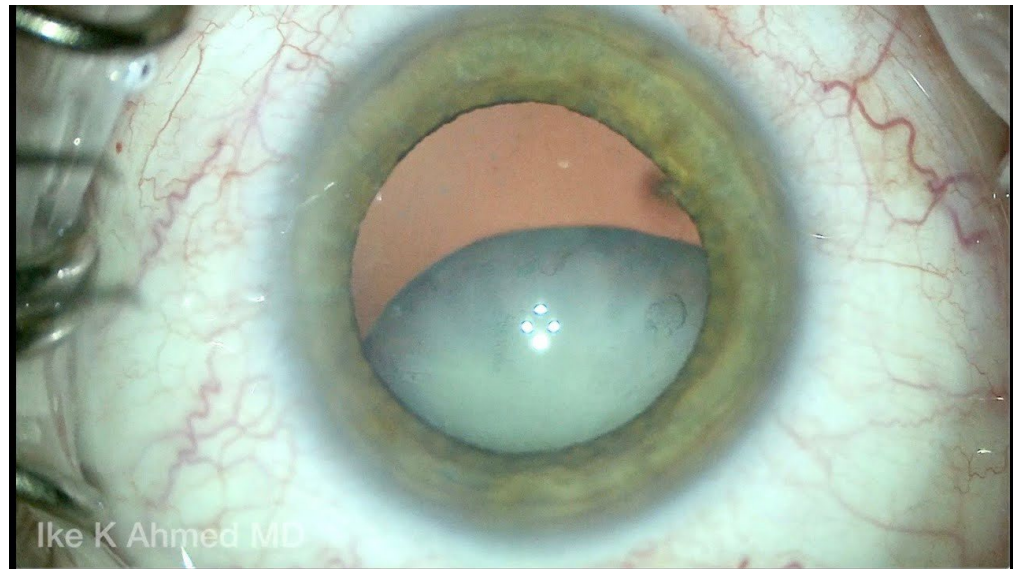
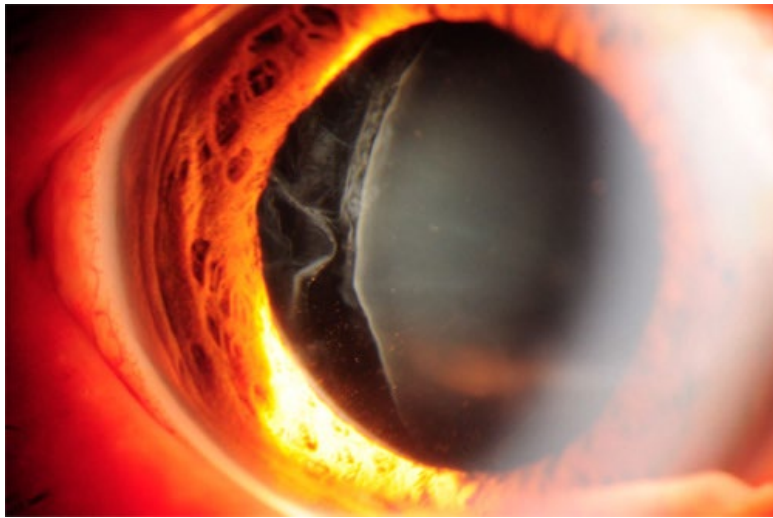


- Cataracts associated with **blunt trauma** are

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

Lens subluxation or dislocation

Cataracts Associated with Trauma or Radiation



Traumatic cataract with subluxation

Q

Cataracts Associated with Trauma or Radiation



- Cataracts associated with **blunt trauma** are

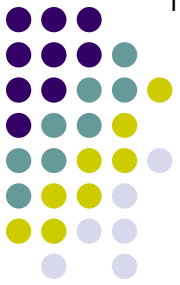
In addition to cataract formation, what other serious lens-related sequelae often follows blunt trauma to the eye?

Lens subluxation or dislocation

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

A

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?

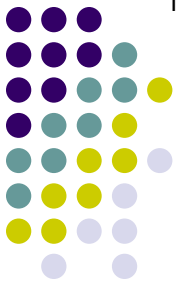
Lens subluxation or dislocation

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

Phacodonesis

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?

Lens subluxation or dislocation

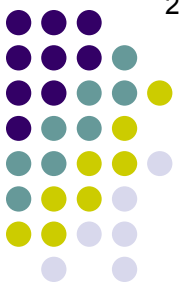
Other than visible displacement from its proper location, what lens-related sign is very worrisome for zonular disruption secondary to trauma?

Phacodonesis

To what does the term phacodonesis refer?

A

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?

Lens subluxation or dislocation

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

Phacodonesis

To what does the term phacodonesis refer?

A visible tremulousness of the lens in response to eye movements



- Cataracts associated with **blunt trauma** are

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

Lens subluxation or dislocation

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

Phacodonesis

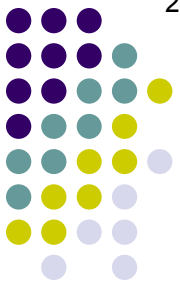
To what does the term phacodonesis refer?

A visible **tremulousness** of the lens in response to eye movements

A similar trauma-induced tremulousness may be observed in the iris. What is it called?

A

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?

Lens subluxation or dislocation

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

Phacodonesis

To what does the term phacodonesis refer?

A visible **tremulousness** of the lens in response to eye movements

A similar trauma-induced tremulousness may be observed in the iris. What is it called?

Iridodonesis

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?

Lens subluxation or dislocation

*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)?*

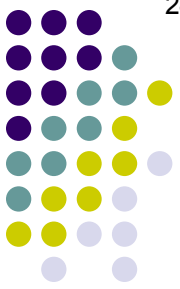
To what does the term phacodonesis refer?

A visible **tremulousness** of the lens in response to eye movements

A similar trauma-induced tremulousness may be observed in the iris. What is it called?
Iridodonesis

A

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?

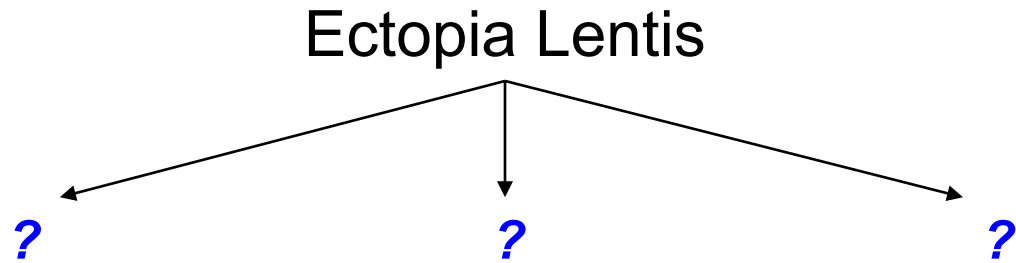
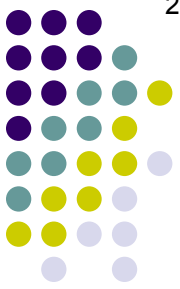
Lens subluxation or dislocation

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)?
Ectopia lentis

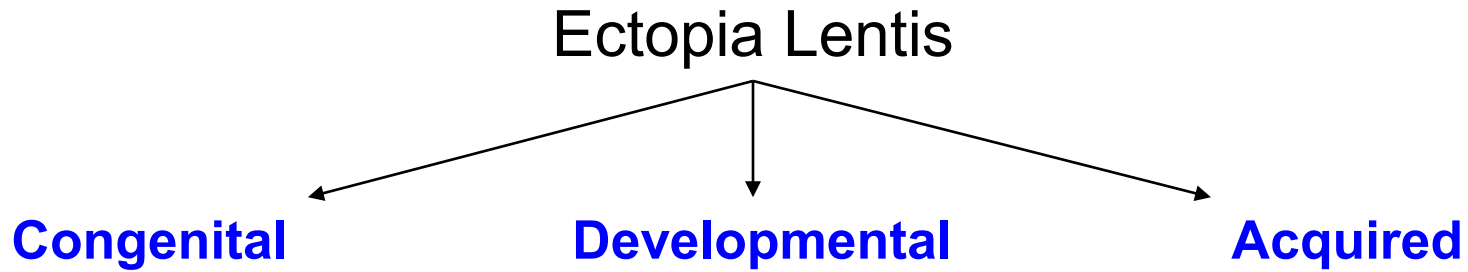
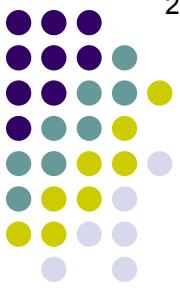
To what does the term phacodonesis refer?

A visible **tremulousness** of the lens in response to eye movements

A similar trauma-induced tremulousness may be observed in the iris. What is it called?
Iridodonesis



The BCSC series divides ectopia lentis into three categories:

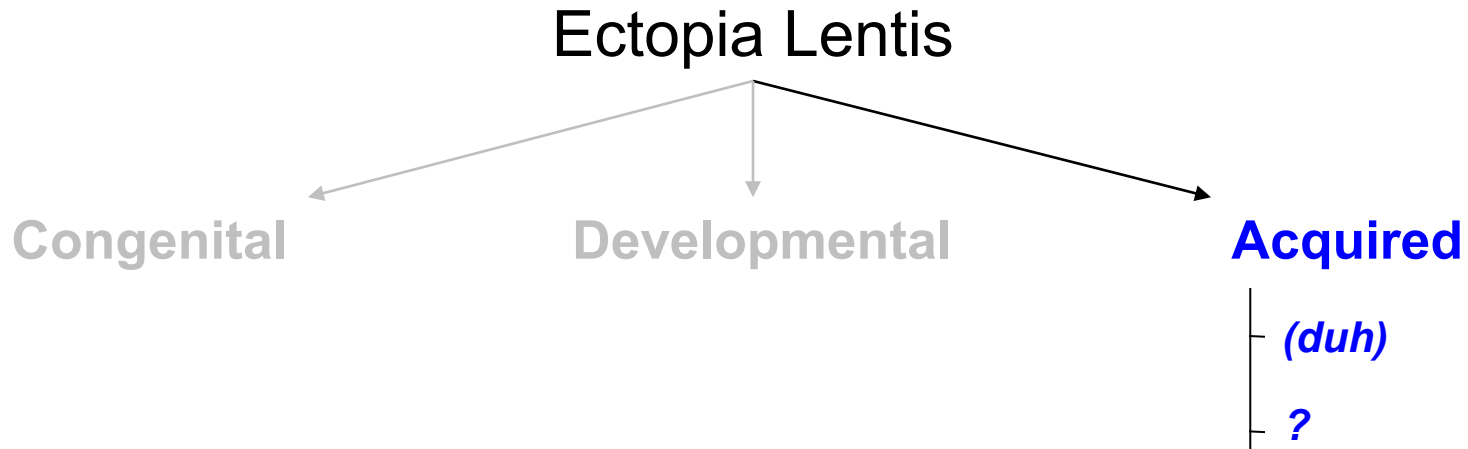
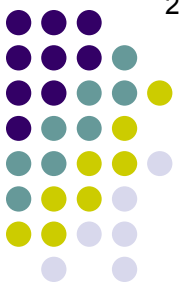


The BCSC series divides ectopia lentis into three categories:

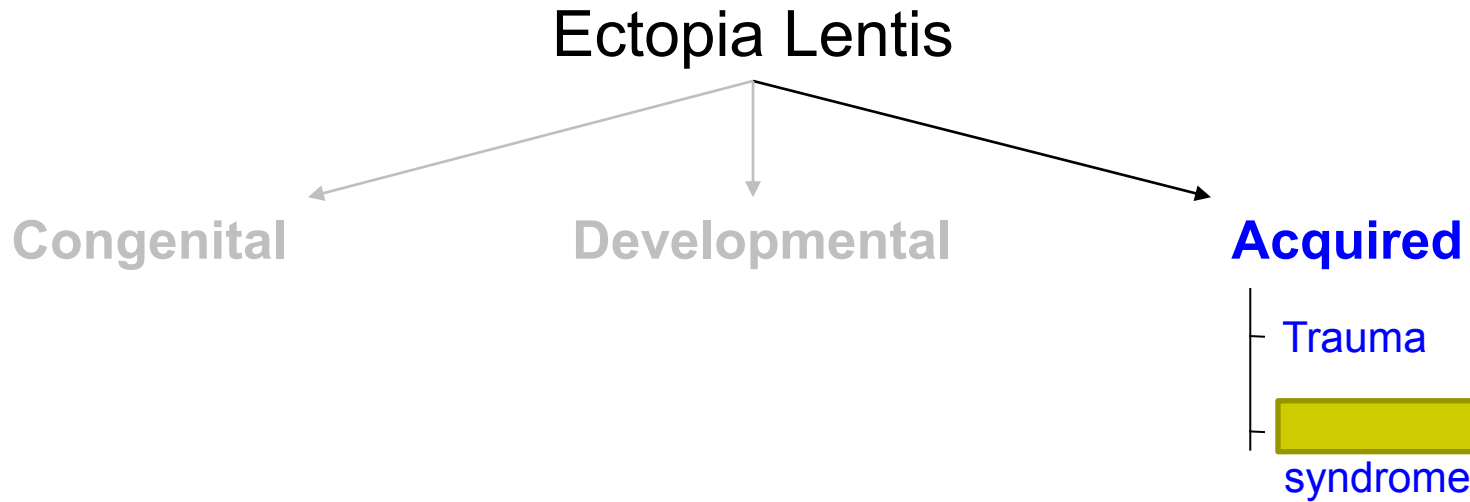
Q

Cataracts Associated with Trauma or Radiation

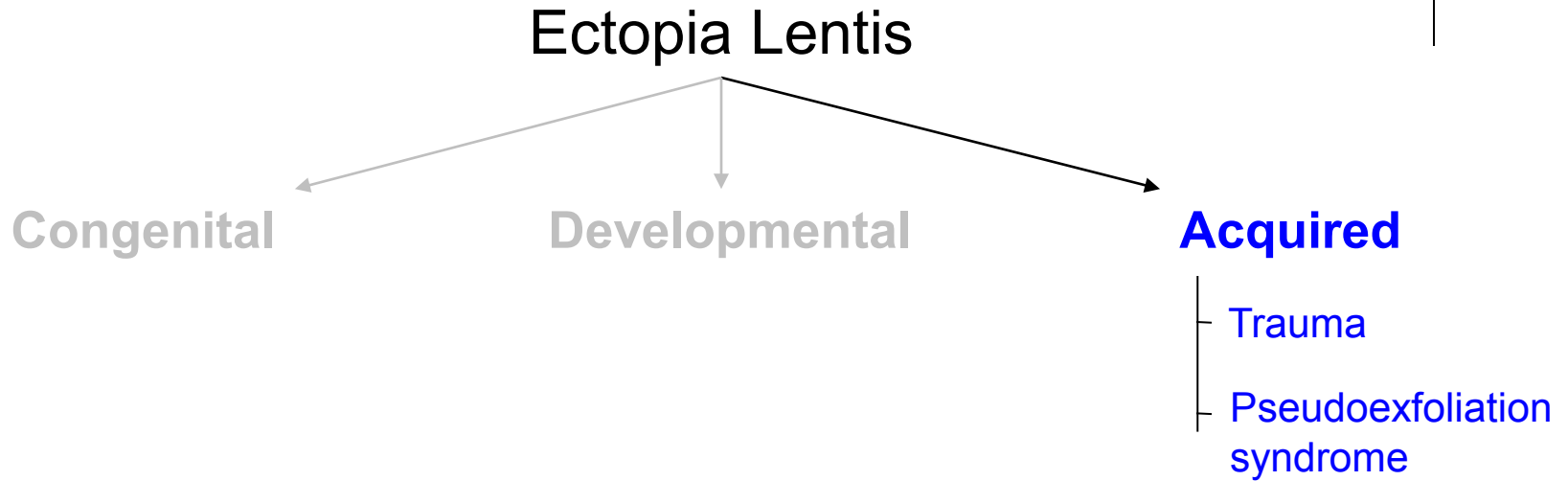
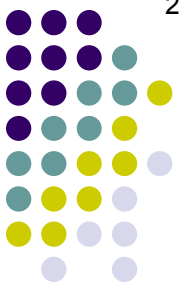
27



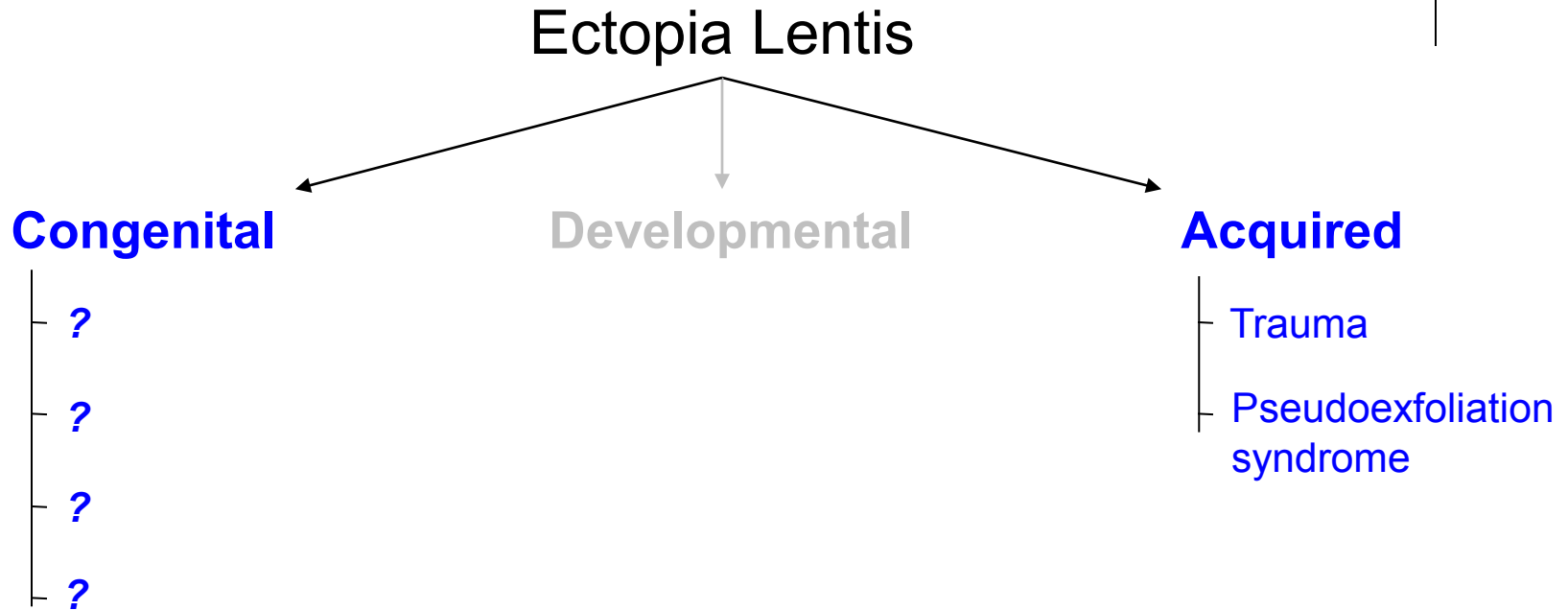
What are the two **acquired** causes covered in the BCSC?



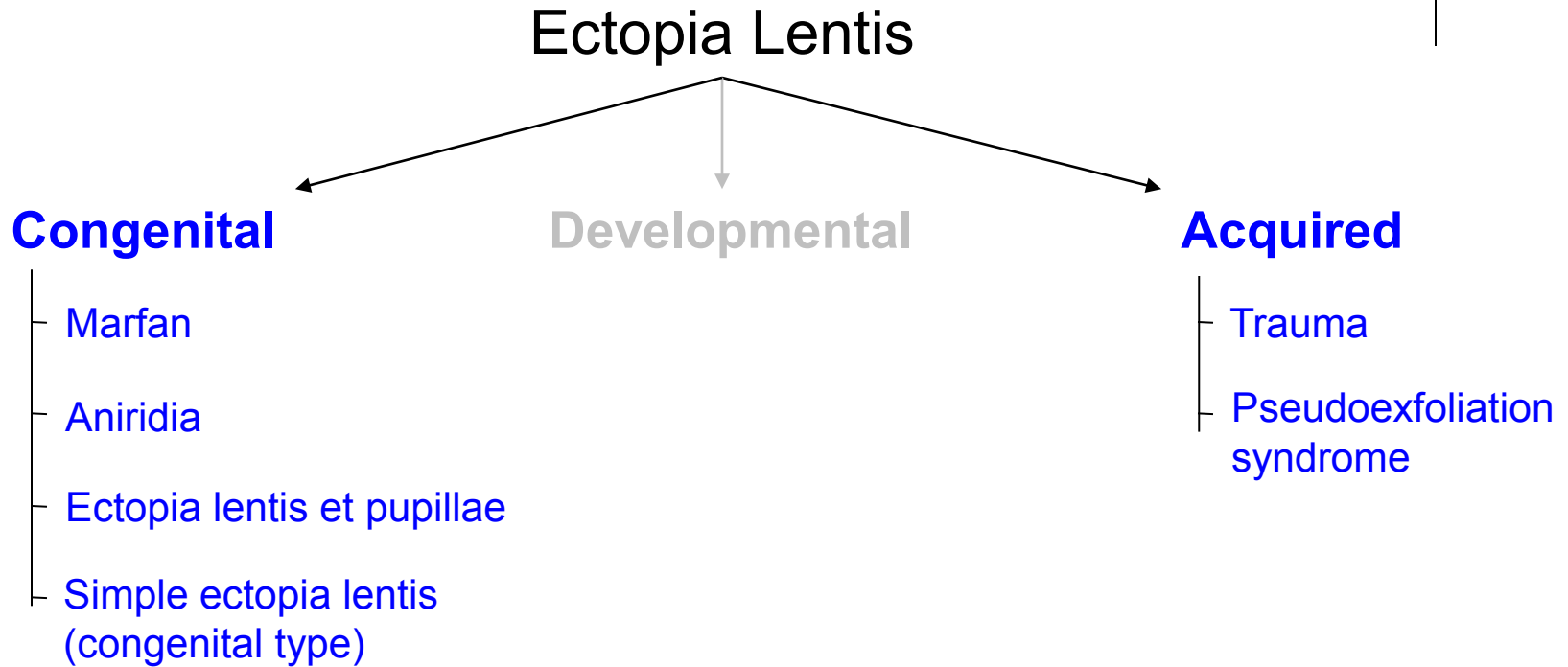
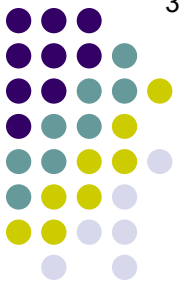
What are the two **acquired** causes covered in the BCSC?



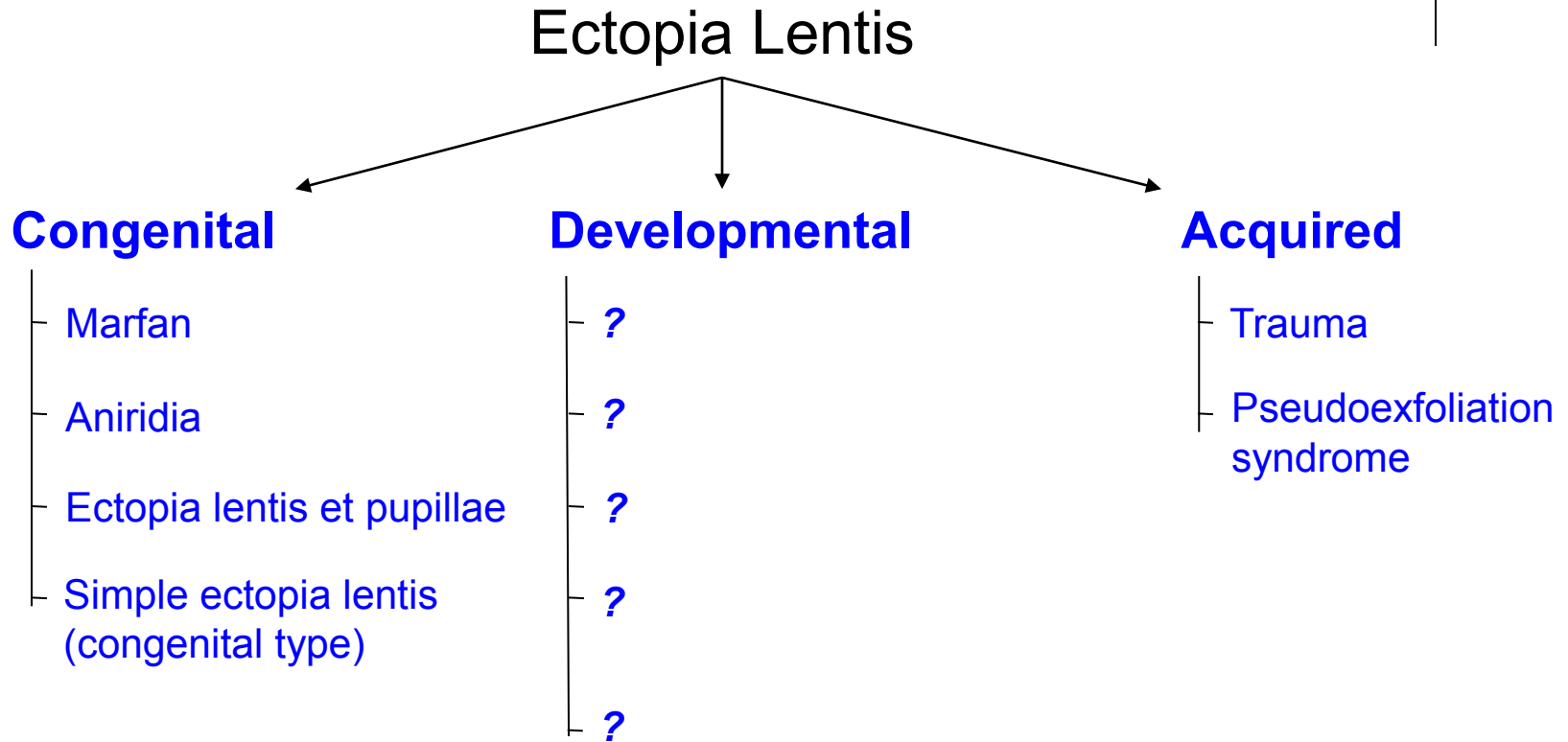
*What are the two **acquired** causes covered in the BCSC?*



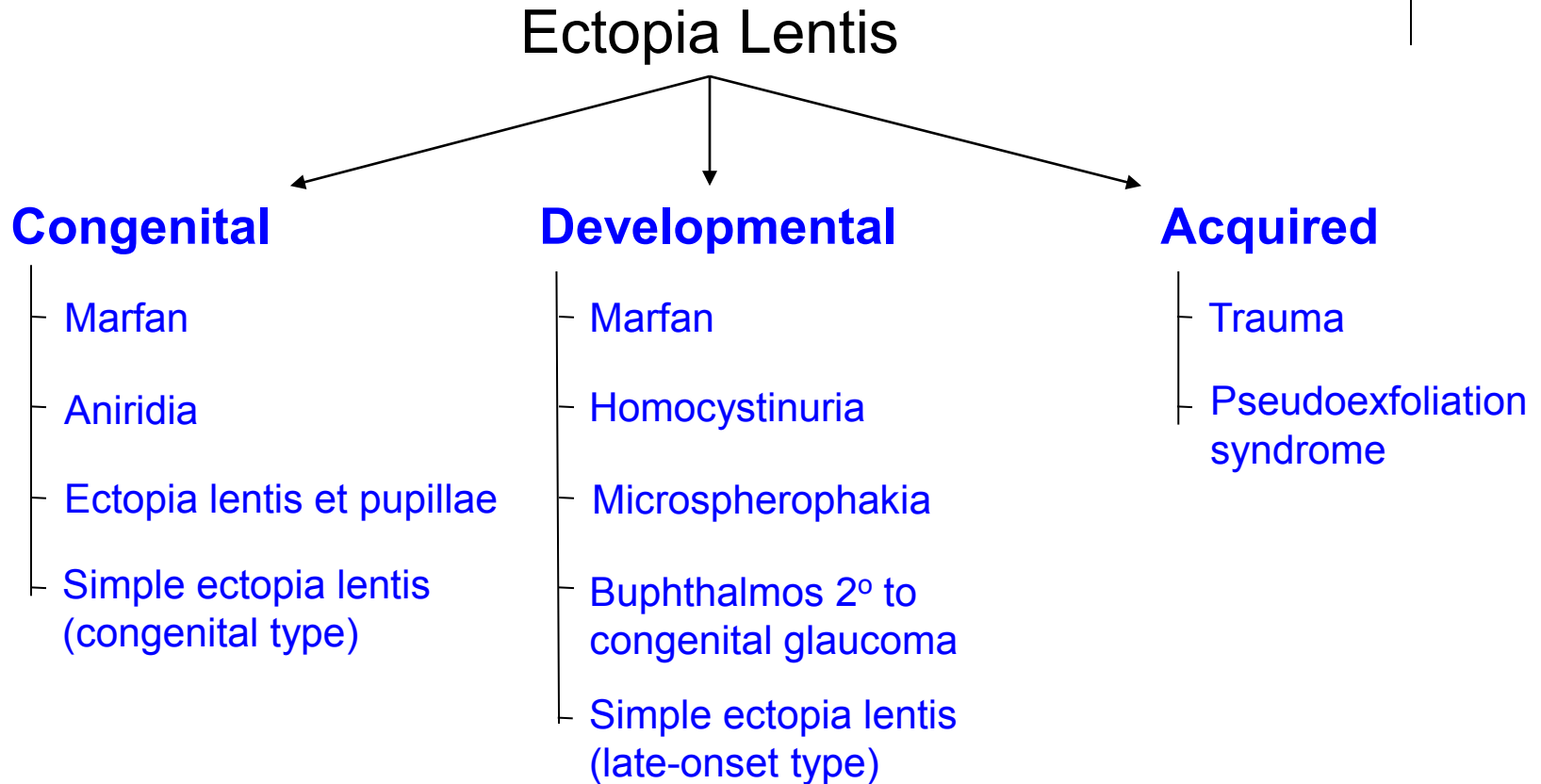
What are the four **congenital** causes covered in the BCSC?



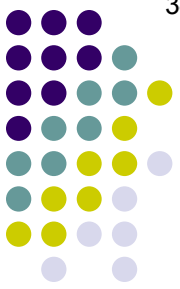
*What are the four **congenital** causes covered in the BCSC?*



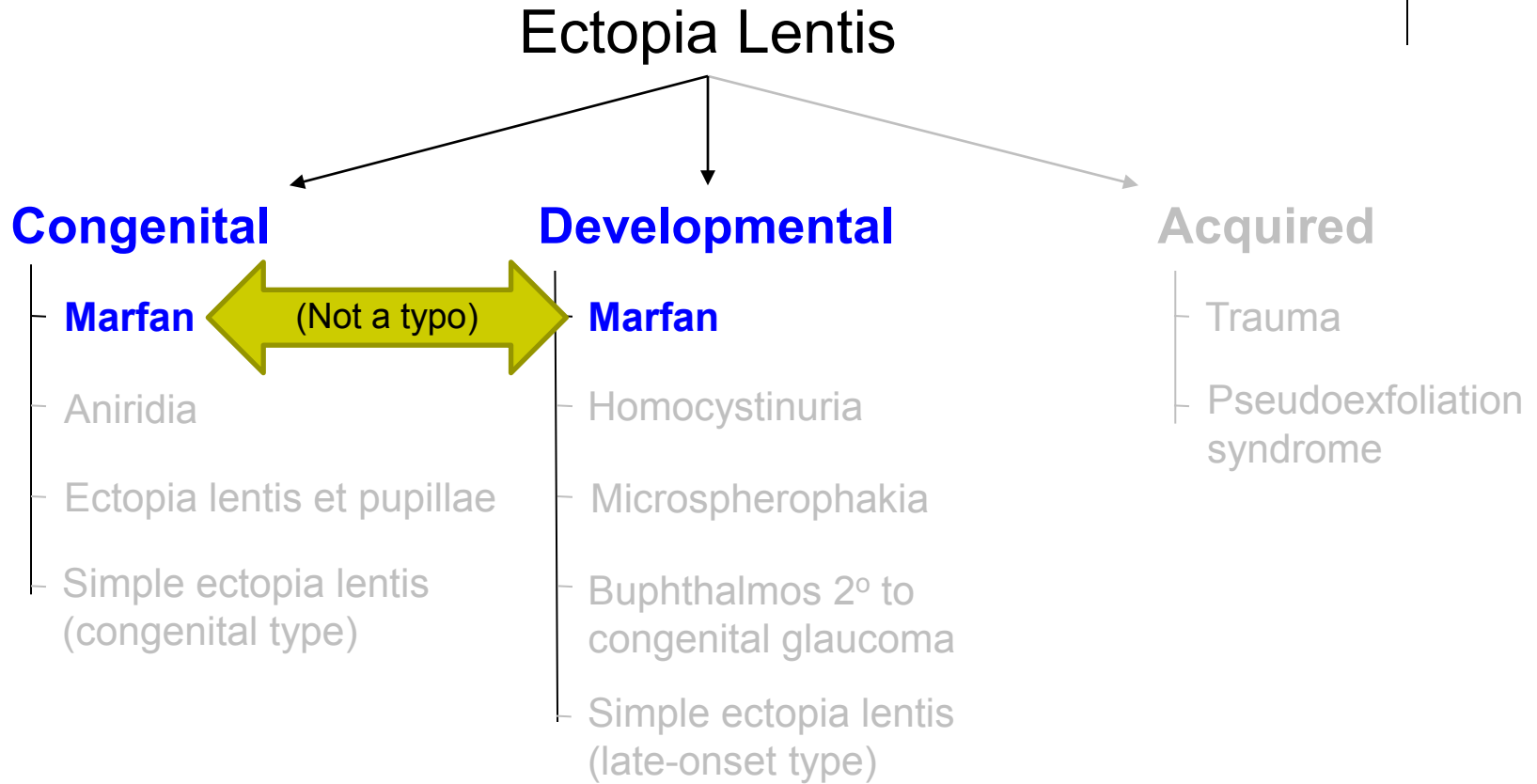
*What are the five **developmental** causes covered in the BCSC?*



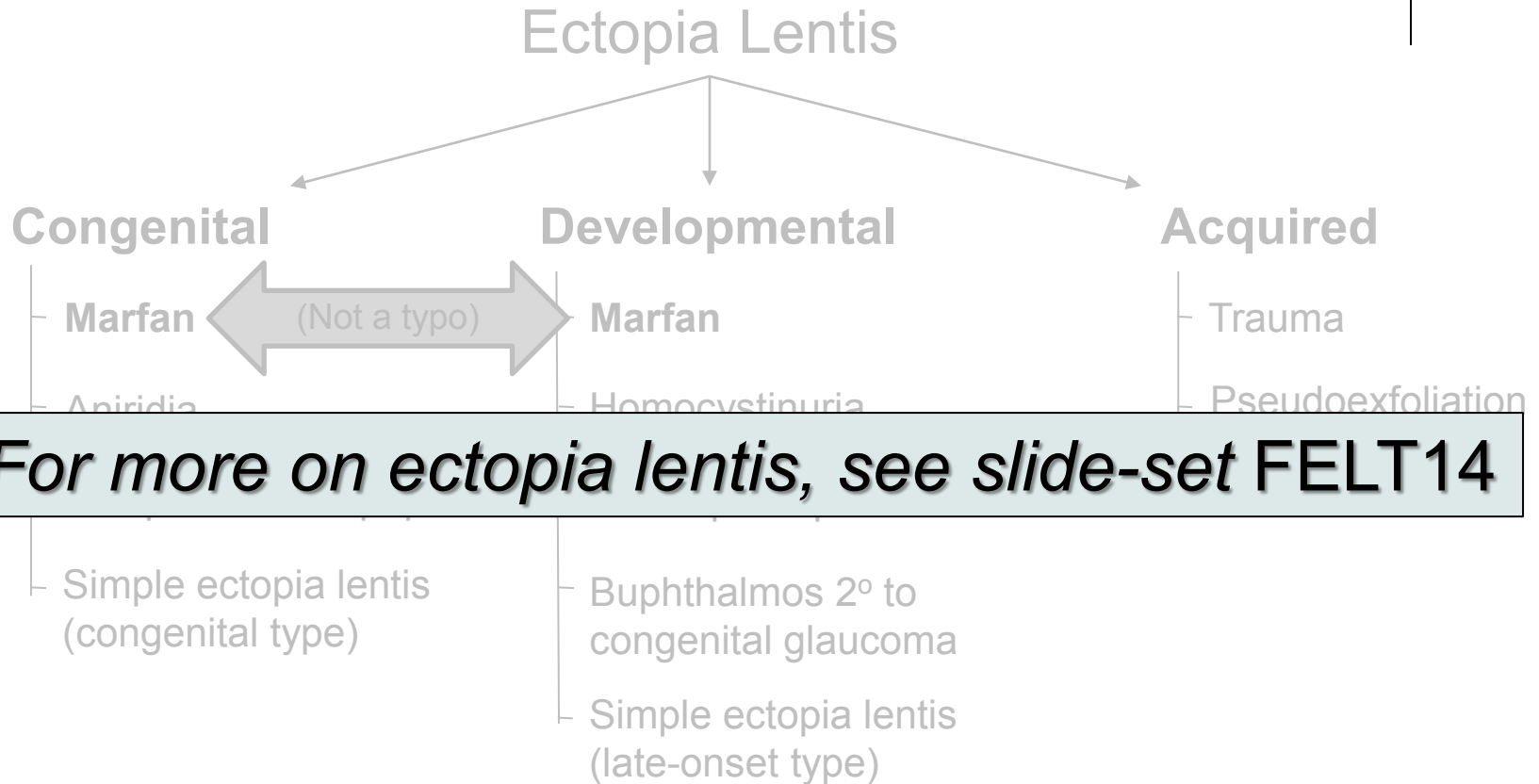
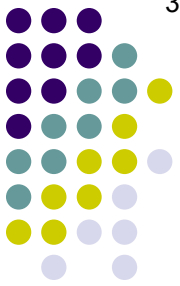
*What are the five **developmental** causes covered in the BCSC?*



Cataracts Associated with Trauma or Radiation



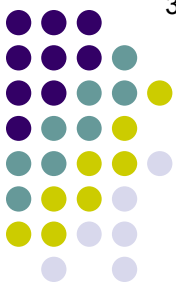
Cataracts Associated with Trauma or Radiation



Q

Cataracts Associated with Trauma or Radiation

- Is exposure to radiation associated with cataract formation?

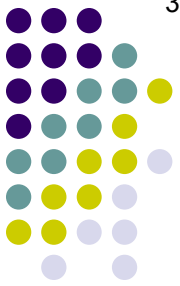


A

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?

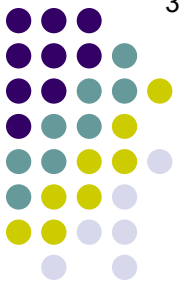
Ionizing:

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**

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**

Charged particle: **Yes**

Infrared:

UV:

Microwave:



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

Ionizing: **Most definitely**

Charged particle: **Yes**

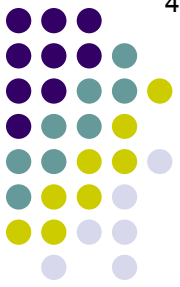
Infrared: **Yeah, but...**

UV:

Microwave:

Q/A

Cataracts Associated with Trauma or Radiation



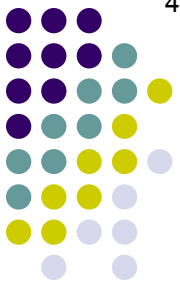
- Is exposure to radiation associated with cataract formation? **Yes**
- Which of the following forms of radiation cause cataracts?
 - Ionizing: **Most definitely**
 - Charged particle: **Yes**
 - Infrared: **Yeah, but...**
 - UV: **Maybe**
 - Microwave:

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**
 - Infrared: **Yeah, but...**
 - UV: **Maybe**
 - Microwave: **Eh**



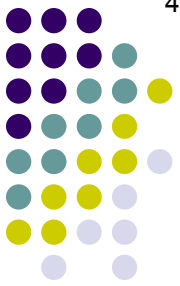
Q

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?



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



Q

Cataracts Associated with Trauma or Radiation

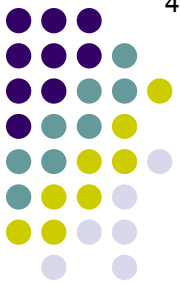
- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

Ionizing: Most definitely

In what situation is

During an X-ray

You mean one XR can cause a cataract?!



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?

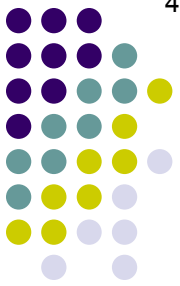
Ionizing: Most definitely

In what situation is

During an X-ray

You mean one XR can cause a cataract?!

Not hardly, no



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

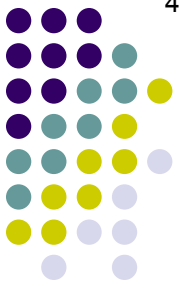
In what situation is

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

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

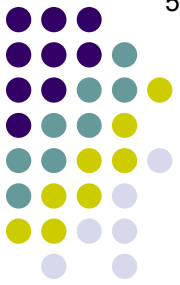
During an X-ray

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

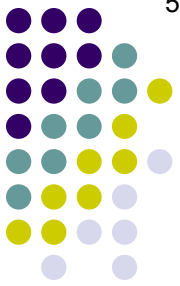
- Is exposure to radiation associated with cataract formation? Yes
- Which of the following forms of radiation cause cataracts?

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?

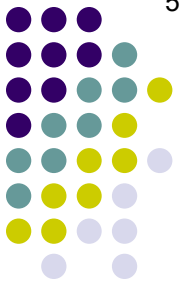
During an X-ray

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?

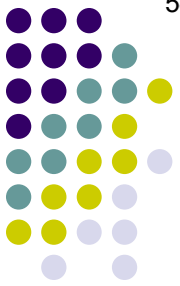
During an X-ray

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

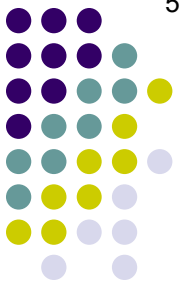
In what situation is the lens most likely to be exposed to charged-particle radiation?

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?

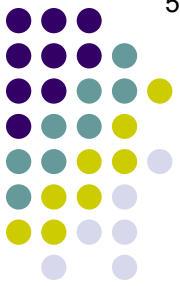
Ionizing: Most definitely

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

58



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

Ionizing: Most definitely

Charged particle: Yes

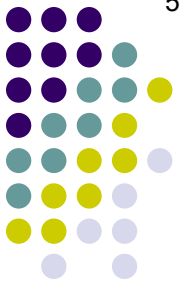
Infrared: Yeah, but...

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...

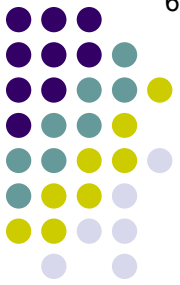
UV: Maybe

Microwave: Eh

Q

Cataracts Associated with Trauma or Radiation

60



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

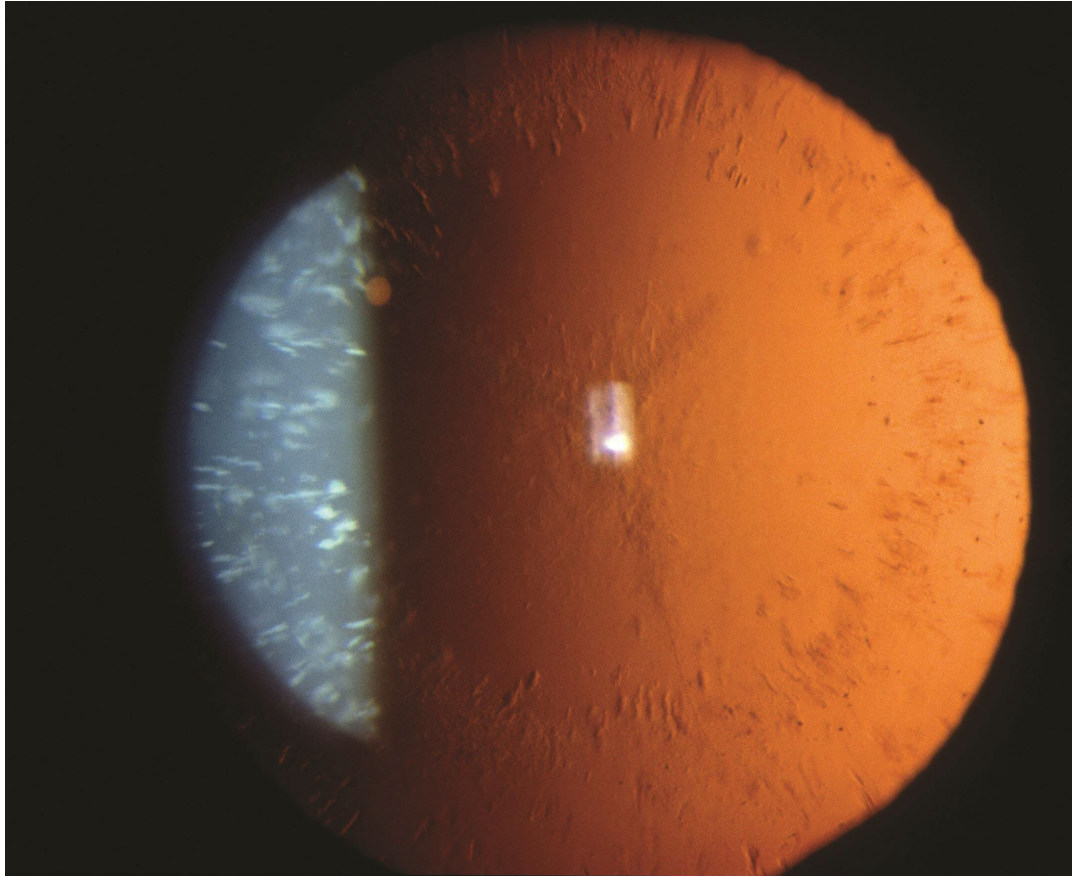
Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh

Cataracts Associated with Trauma or Radiation

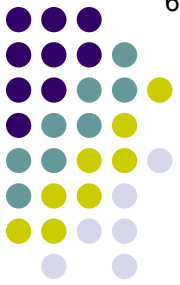


Glassblower's cataract

Q

Cataracts Associated with Trauma or Radiation

63



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

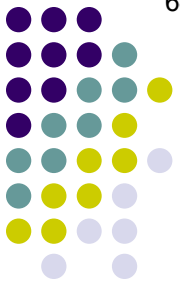
Infrared: Yeah, but...

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

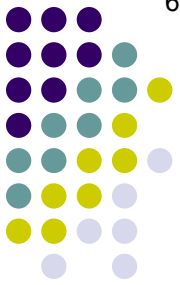
Infrared: Yeah, but...

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

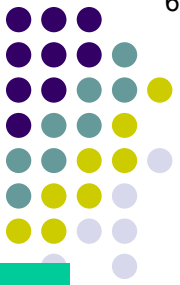
Ionizing: Most definitely

Charged particle: Yes

Infrared: Yeah, but...

UV: Maybe

Microwave: Eh



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?

Infrared: Yeah, but...

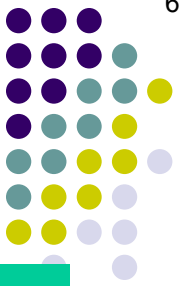
UV: Maybe

Microwave: Eh

A

Cataracts Associated with Trauma or Radiation

68



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...

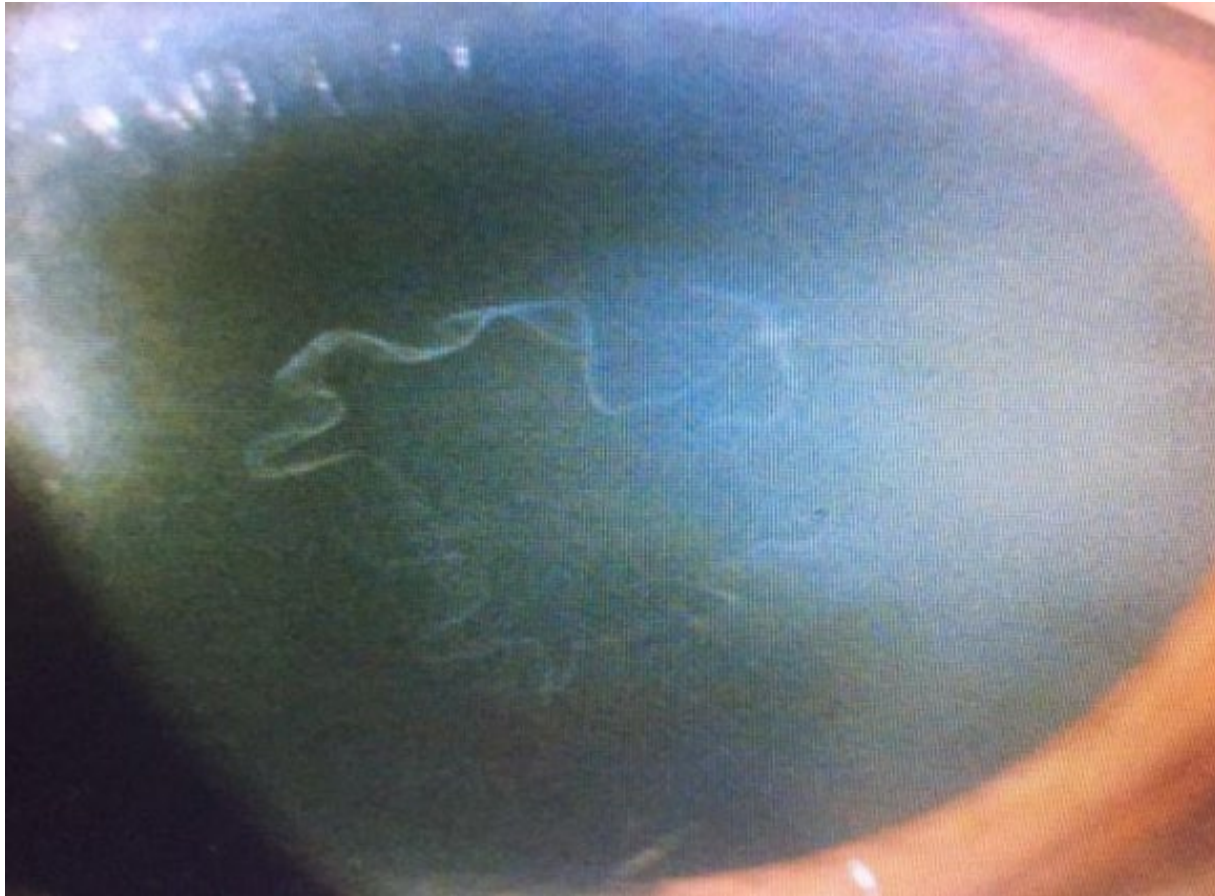
UV: Maybe

Microwave: Eh

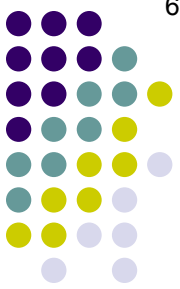
What is the name for this process?

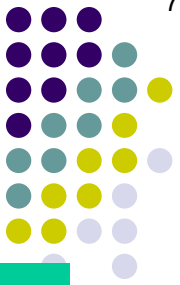
'Exfoliation'

Cataracts Associated with Trauma or Radiation



Exfoliation





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**

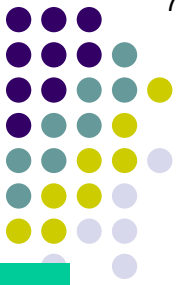
Ionizing: Most definitely

Charged particle: Yes

What is the name for this process?

'Exfoliation'

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



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

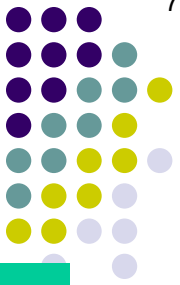
Charged particle: Yes

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 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

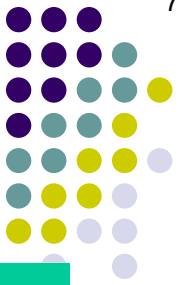
Charged particle: Yes

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).



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

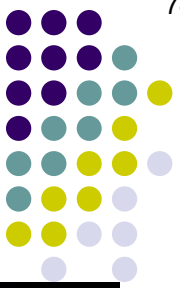
What is the name for this process?

'Exfoliation'

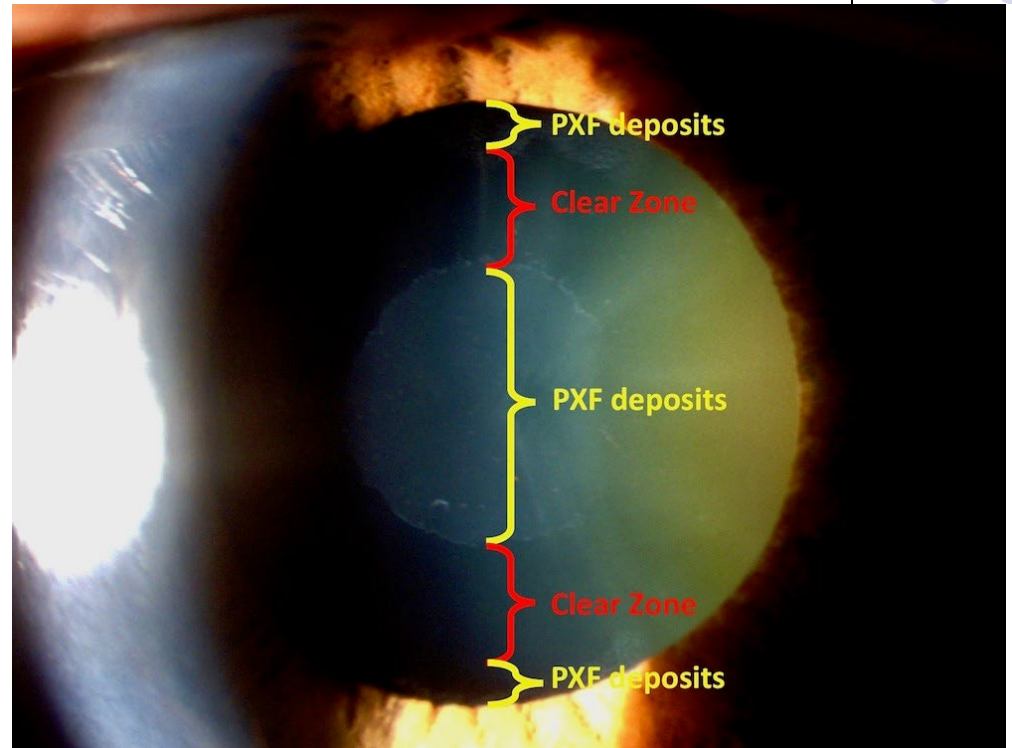
'Exfoliation'? Isn't it called **pseudoexfoliation**?

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

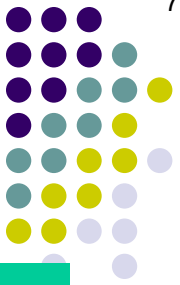


The exfoliation pic from a few slides ago



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



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?

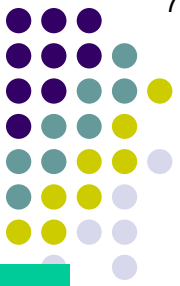
It can cause **PXS** associated with an increased risk of cataract a la exfoliation and glassblower's cataract?

in a scroll-like manner

me for this process?

'Exfolia

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).



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 **PXS** associated with an increased risk of cataract a la exfoliation and glassblower's cataract? in a scroll-like manner

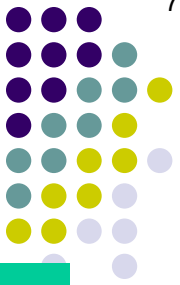
Is PXS associated with an increased risk of cataract a la exfoliation and glassblower's cataract?

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).



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 **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)

Does PXS have any other ocular associations of note?

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).



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 **PXS** in a scroll-like manner

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

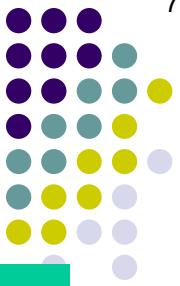
Yes (although the cataract isn't necessarily cortical in type)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of **Exfoliation Syndrome**

'Exfoliation Syndrome'

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).



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 **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)

Does PXS have any other ocular associations of note?

Yes, PXS pts are at increased risk of glaucoma

'Exfolia

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



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 **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)

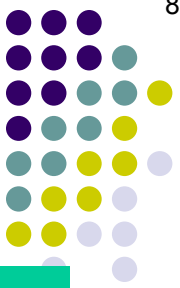
Does PXS have any other ocular associations of note?

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

'Exfolia

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



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 **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)

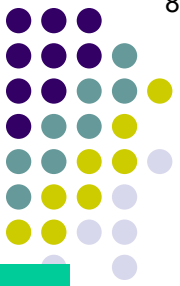
Does PXS have any other ocular associations of note?

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

'Exfolia

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



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

It can cause

intense infrared

in a scroll-like manner

one for this process?

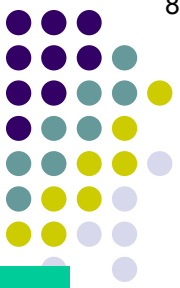
Yes, PXS pts are at increased risk of **glaucoma**, as well

'Exfoliation' 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 exposure, are they at risk for open, or closed-angle glaucoma?

Open

It can cause

intense infrared

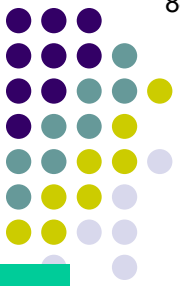
in a scroll-like manner

one for this process?

Yes, PXS pts are at increased risk of **glaucoma**, as well

'Exfoliation' 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).



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, what is the lens doing?
It can cause the lens to contract in a scroll-like manner

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

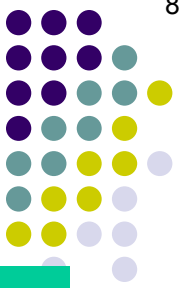
Is it primary OAG (POAG), or 2ndry OAG?

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

'Exfoliation' 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 exposure, are they at risk for open, or closed-angle glaucoma?

Open

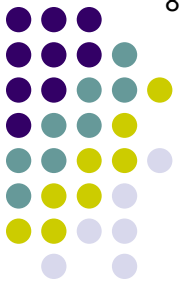
Is it primary OAG (POAG), or 2ndry OAG?

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

'Exfoliation' 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

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

Ionizing: Most definitely

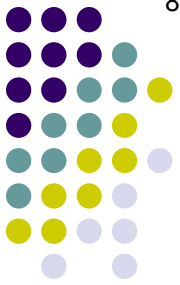
Charged particle: Yes

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

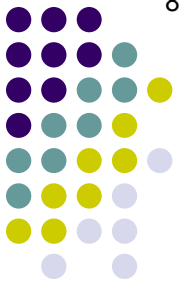
Infrared: Yeah, but...

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?

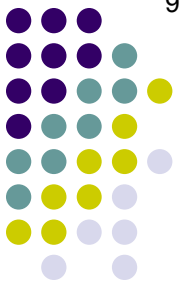
In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

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

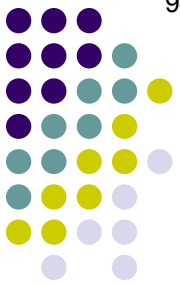
Other than becoming a vampire, what can be done to avoid exposing the lens to UV radiation?
Wear UV-blocking sunglasses, and/or a hat with a visor

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