● Cataracts associated with blunt trauma are often stellate or rosette initially.
Cataracts associated with blunt trauma are often stellate or rosette initially.
Cataracts associated with blunt trauma are often stellate or rosette initially, but may progress to two words.
Cataracts associated with blunt trauma are often stellate or rosette initially, but may progress to total opacification.
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Can blunt-trauma-induced cataract resolve spontaneously?
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.
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: Vossius ring

(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 Vossius ring

Vossius ring (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 **Vossius ring**

*Is a Vossius ring visually significant in and of itself?*
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.
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?
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.
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**

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

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

Iridodonesis
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-iridic pigment on the anterior capsule seen in conjunction with blunt-trauma cataracts?

A Vossius ring

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Phacodonesis

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Iridodonesis
Cataracts Associated with Trauma or Radiation

Traumatic cataract with subluxation
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**A** Vossius ring

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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 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?

**Vossius ring**

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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
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.

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:
What are the two acquired causes covered in the BCSC?
What are the two acquired causes covered in the BCSC?
Cataracts Associated with Trauma or Radiation

Ectopia Lentis

Congenital Developmental

Acquired

- Trauma
- Pseudoexfoliation syndrome

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?
Ectopia Lentis

Congenital
- Marfan
- Aniridia
- Ectopia lentis et pupillae
- Simple ectopia lentis (congenital type)

Developmental
- ?
- ?
- ?

Acquired
- Trauma
- Pseudoexfoliation syndrome

What are the five developmental causes covered in the BCSC?
Cataracts Associated with Trauma or Radiation

Ectopia Lentis

**Congenital**
- Marfan
- Aniridia
- Ectopia lentis et pupillae
- Simple ectopia lentis (congenital type)

**Developmental**
- Marfan
- Homocystinuria
- Microspherophakia
- Buphthalmos 2° to congenital glaucoma
- Simple ectopia lentis (late-onset type)

**Acquired**
- Trauma
- Pseudoexfoliation syndrome

*What are the five developmental causes covered in the BCSC?*
Cataracts Associated with Trauma or Radiation

Ectopia Lentis

Congenital
- Marfan (Not a typo)
- Aniridia
- Ectopia lentis et pupillae
- Simple ectopia lentis (congenital type)

Developmental
- Marfan
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- Microspherophakia
- Buphthalmos 2° to congenital glaucoma
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Cataracts Associated with Trauma or Radiation

Ectopia Lentis

Congenital
- Marfan
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- Simple ectopia lentis (congenital type)

Developmental
- Marfan
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Acquired
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- Buphthalmos 2° to congenital glaucoma
- Simple ectopia lentis (late-onset type)

For more on ectopia lentis, see slide-set FELT14
• Is exposure to radiation associated with cataract formation?
Is exposure to radiation associated with cataract formation? Yes
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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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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Microwave:
Q/A

Cataracts Associated with Trauma or Radiation

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

**In what situation is one most likely to be exposed to ionizing 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
Is exposure to radiation associated with cataract formation? Yes

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

You mean one XR can cause a cataract?!
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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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

You mean one XR can cause a cataract?!

- Not hardly, no

Cataracts Associated with Trauma or Radiation
Cataracts Associated with Trauma or Radiation

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

- 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)
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: Yeah, but...
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- Microwave: Eh

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?
Cataracts Associated with Trauma or Radiation

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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?
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What is the temporal relationship between exposure to ionizing radiation and subsequent cataract development?
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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
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
Is exposure to radiation associated with cataract formation? Yes

Which of the following forms of radiation cause cataracts?
- Ionizing: Most definitely
- Charged particle: Yes
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- UV: Maybe
- Microwave: Eh

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

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

In what situation is the lens most likely to be exposed to charged-particle radiation?
- During treatment for a choroidal melanoma
Is exposure to radiation associated with cataract formation? Yes

Which of the following forms of radiation cause cataracts?

- Ionizing: Most definitely
- Charged particle: Yes
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- UV: Maybe
- Microwave: Eh

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

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...
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Is exposure to radiation associated with cataract formation? Yes

Which of the following forms of radiation cause cataracts?
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By what occupation-related name is this sort of cataract known?
- Glassblower's cataract
In what situation is one most likely to be exposed to infrared radiation?
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By what occupation-related name is this sort of cataract known?
‘Glassblower’s cataract’

Ionizing: Most definitely
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Cataracts Associated with Trauma or Radiation
Glassblower’s cataract
Is exposure to radiation associated with cataract formation? Yes

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By what occupation-related ‘Glassblower’s cataract’

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

Cortical
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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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?

Cataracts Associated with Trauma or Radiation

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
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Is exposure to radiation associated with cataract formation? Yes

Which of the following forms of radiation cause cataracts?
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**Q**

*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 off in a scroll-like manner
In what situation is one most likely to be exposed to infrared radiation?
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By what occupation-related name is this sort of cataract known?
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By what occupation-related name is this sort of cataract known?
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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

What is the name for this process?
'Exfoliation'
Cataracts Associated with **Trauma or Radiation**

Exfoliation
Is exposure to radiation associated with cataract formation? Yes.

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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?
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What is the name for this process?
- ‘Exfoliation’

‘Exfoliation’? Isn’t it called pseudoexfoliation?

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?
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‘Exfoliation’? Isn’t it called pseudoexfoliation?
While they share some superficial similarities vis a vis appearance, pseudoexfoliation (syndrome, PXS) is a different, unrelated condition

Cataracts Associated with Trauma or Radiation

Ionizing: Most definitely
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By what occupation-related name is this sort of cataract known?
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Prior to the development of a cataract, chronic exposure to intense infrared radiation can cause what striking change to the lens?
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‘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).
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?
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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).

Ionizing: Most definitely
Charged particle: Yes
Cataracts Associated with Trauma or Radiation

The exfoliation pic from a few slides ago

*Pseudo*exfoliation (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
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

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 CE complications.

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).
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In what situation is one most likely to be exposed to infrared radiation?
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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 'Exfoliation'?

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)

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PXS

While they share some superficial similarities vis-à-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).
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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 CE complications.
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Cataracts Associated with Trauma or Radiation

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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. 'Exfoliation'?

PXS pts are at increased risk for open, or closed-angle glaucoma? Yes, as well as intra- and post-op cataract surgery complications.

Are they at risk for open, or closed-angle glaucoma? Yes, PXS pts are at increased risk of glaucoma. 

While they share some superficial similarities vis-à-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 the outer layer of the anterior capsule to peel in a scroll-like manner. What is this process called?
'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, fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

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. 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 the outer layer of the anterior capsule to peel in a scroll-like manner. What is this process called? '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, fibrillar material is created elsewhere and deposits on the capsule surface (one of a number of intraocular locations on which deposits occur).

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

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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, 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

**Q**

*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 the outer layer of the anterior capsule to peel in a scroll-like manner—this is called *exfoliation*. However, *pseudoexfoliation* (PXS) syndrome 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).

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.

**PXS**

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

**Glaucoma**

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

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**PXS**

*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).
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

In what situation is one most likely to be exposed to infrared radiation?
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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 for open-angle glaucoma
  - 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’)

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

Are they at risk for closed-angle glaucoma?
- No

Is PXS associated with open angle glaucoma?
- Yes

Is PXS associated with secondary angle glaucoma?
- Yes

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

Cataracts Associated with Trauma or Radiation

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Are they at risk for closed-angle glaucoma?
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In what situation is one most likely to be exposed to infrared radiation?
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*What’s with the ‘Yeah, but…’?*
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*What’s with the ‘Yeah, but…’?*
This sort of cataract has become quite rare (to put it mildly)*
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In what situation is one most likely to be exposed to UV radiation?

UV: Maybe
Microwave: Eh
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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- UV: Maybe
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In what situation is one most likely to be exposed to UV radiation?
Being outside, during the daytime

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

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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

What's with the ‘Maybe’?
It's estimated that UV radiation only accounts for about 10% of the risk for developing a cataract
Is exposure to radiation associated with cataract formation? Yes

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- Charged particle: Yes
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**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.