How many ‘age-related’ types of cataracts are there?
How many ‘age-related’ types of cataracts are there? Three
What are the three age-related types of cataracts?
What are the three age-related types of cataracts?

- **NSC** (Nuclear sclerotic cataract)
- **Cortical**
- **PSC** (Posterior subcapsular cataract)
What are the three age-related types of cataracts?

NSC
Risk factors: 

Cortical
Risk factors: 

PSC
Risk factors: 

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Steroids**
What are the three age-related types of cataracts?

NSC
Risk factors:

Cortical
Risk factors:

PSC
Risk factors:
---Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Steroids
Which of the following routes of steroid administration have been associated with cataract formation:

--Topical?
--Subconjunctival?
--Sub-Tenon’s?
--Intravitreal?
--PO?
--IV?
--Inhaled?
--Intranasal?

Steroids

PSC

Risk factors:

--Steroids

Pts with a propensity to develop a steroid-induced PSC are susceptible to another steroid-related complication—what is it?

Ocular hypertension

Steroid-induced PSCs in children differ in an important way from steroid-induced PSCs in adults. What is it?

Cessation of steroid therapy in children may result in regression and resolution of the PSC; this does not occur in adults

Cataracts: The Big Three
Cataracts: The Big Three

Which of the following routes of steroid administration have been associated with cataract formation:
--Topical
--Subconjunctival
--Sub-Tenon’s
--Intravitreal
--PO
--IV
--Inhaled
--Intranasal

All have been associated with PSC formation!

Risk factors:
--Steroids

Pts with a propensity to develop a steroid-induced PSC are susceptible to another steroid-related complication: Ocular hypertension

Steroid-induced PSCs in children differ in an important way from steroid-induced PSCs in adults. What is it?

Cessation of steroid therapy in children may result in regression and resolution of the PSC; this does not occur in adults
What are the three age-related types of cataracts?

Risk factors:

Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Steroids

Which of the following routes of steroid administration have been associated with cataract formation:

--Topical
--Subconjunctival
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What are the three age-related types of cataracts?

Steroids

Risk factors:

Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

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--Subconjunctival
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--Intravitreal
--PO
--IV
--Inhaled
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Steroid-induced PSCs in children differ in an important way from steroid-induced PSCs in adults. What is it?
Cessation of steroid therapy in children may result in regression and resolution of the PSC (this does not occur in adults)
What are the three age-related types of cataracts?

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Miotics**
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors: Miotics

- **Cortical**
  - Risk factors: Miotics

- **PSC**
  - Risk factors: Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Miotics**
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics

- **Cortical**
  - Risk factors:
    - Miotics

- **PSC**
  - Risk factors:
    - Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Statins**
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics
    - Statins

- **Cortical**
  - Risk factors:
    - Miotics

- **PSC**
  - Risk factors:
    - Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Statins**
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics
    - Statins

- **Cortical**
  - Risk factors:
    - Miotics

- **PSC**
  - Risk factors:
    - Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

*Infrared radiation*
What are the three age-related types of cataracts?

NSC
Risk factors:
-- Miotics
-- Statins

Cortical
Risk factors:
-- Miotics
-- Infrared radiation

PSC
Risk factors:
-- Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Infrared radiation
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors: Miotics, Statins

- **Cortical**
  - Risk factors: Miotics, Infrared radiation

- **PSC**
  - Risk factors: Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**UV radiation**
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics
    - Statins

- **Cortical**
  - Risk factors:
    - Miotics
    - Infrared radiation
    - UV radiation

- **PSC**
  - Risk factors:
    - Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**UV radiation**
What are the three age-related types of cataracts?

**NSC**
Risk factors:
--Miotics
--Statins

**Cortical**
Risk factors:
--Miotics
--Infrared radiation
--UV radiation

**PSC**
Risk factors:
--Steroids

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

*Diabetes mellitus*
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics
    - Statins
    - DM

- **Cortical**
  - Risk factors:
    - Miotics
    - Infrared radiation
    - UV radiation
    - DM

- **PSC**
  - Risk factors:
    - Steroids
    - DM

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

*Diabetes mellitus*
What are the three age-related types of cataracts?

- NSC
  Risk factors:
  - Miotics
  - Statins
  - DM

- Cortical
  Risk factors:
  - Miotics
  - Infrared radiation
  - UV radiation
  - DM

- PSC
  Risk factors:
  - Steroids
  - DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Diabetes mellitus
What are the three age-related types of cataracts?

- **NSC**
  - Risk factors:
    - Miotics
    - Statins
    - DM

- **Cortical**
  - Risk factors:
    - Miotics
    - Infrared radiation
    - UV radiation
    - DM

- **PSC**
  - Risk factors:
    - Steroids
    - DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

*Diabetes mellitus*
What are the three age-related types of cataracts?

There is a DM-related cataract which is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract?

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- Miotics
- Statins
- DM

- Miotics
- Infrared radiation
- UV radiation
- DM

- Steroids
- DM

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract which is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract? A ‘snowflake’ cataract

Risk factors:
- Miotics
- Statins
- DM

- Steroids
- DM
- Infrared radiation
- UV radiation
- DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

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How does a snowflake cataract present initially?

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For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- Miotics
- Statins
- DM
- Miotics
- Infrared radiation
- UV radiation
- DM
- Steroids
- DM

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract which is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract? A ‘snowflake’ cataract

How does a snowflake cataract present initially?
With the abrupt appearance of subcapsular grayish-white opacities

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Diabetes mellitus
Cataracts: The Big Three

Snowflake cataract
What are the three age-related types of cataracts?

There is a DM-related cataract which is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract? A ‘snowflake’ cataract

How does a snowflake cataract present initially?
With the abrupt appearance of subcapsular grayish-white opacities

As it progresses, how does its appearance change?
It becomes a completely opacified/white cortical cataract

Risk factors:
--Miotics
--Statins
--DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?
They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Diabetes mellitus**
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With the abrupt appearance of subcapsular grayish-white opacities

As it progresses, how does its appearance change?
It becomes a completely opacified/white cortical cataract

Risk factors:
--Miotics
--Statins
--DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?
They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract. What is this cataract? A 'snowflake' cataract.

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don't; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- Miotics
- Statins
- DM
- Steroids
- Infrared radiation
- UV radiation
- DM

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract. What is the name of this cataract?

A ‘snowflake’ cataract

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?

They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

Are snowflake cataracts more likely to occur in well-controlled, or poorly-controlled diabetics?

Poorly controlled

How does a snowflake cataract present initially?

With the abrupt appearance of subcapsular grayish-white opacities

As it progresses, how does its appearance change?

It becomes a completely opacified/white cortical cataract

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- Miotics
- Statins
- DM

- Miotics
- Infrared radiation
- UV radiation
- DM

- Steroids
- DM

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract that is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract? 'Snowflake' cataract

How does a snowflake cataract present initially? With the abrupt appearance of subcapsular grayish-white opacities.

As it progresses, how does its appearance change? It becomes a completely opacified/white cortical cataract.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- Miotics
- Statins
- DM
- Steroids
- Infrared radiation
- UV radiation
- DM

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

Diabetes mellitus
What are the three age-related types of cataracts?

There is a DM-related cataract. What is the name of this special form of cataract? **snowflake cataract**

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Diabetes mellitus**

- Steroids
- DM
- Miotics
- Statins
- DM
- Infrared radiation
- UV radiation
- DM
What are the three age-related types of cataracts?

There is a DM-related cataract that does not fit the mold of a senescent cataract. What is the name of this special cataract?

A ‘snowflake’ cataract

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age? They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age.

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Diabetes mellitus**

- Miotics
- Statins
- DM

- Steroids
- Infrared radiation
- UV radiation
- DM
What are the three age-related types of cataracts?

**NSC Cortical PSC**
- **Risk factors:**
  - Miotics
  - Statins
  - DM

**Risk factors:**
- Steroids
- DM

**Risk factors:**
- Miotics
- Infrared radiation
- UV radiation
- DM

For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

**Diabetes mellitus**

**Are snowflake cataracts more likely to occur in well-controlled, or poorly-controlled diabetics?**
- Poorly controlled

**Are snowflake cataracts more likely to occur in younger, or older individuals?**
- Younger

**Do they tend to occur unilaterally, or bilaterally?**
- Bilaterally

There is a DM-related cataract that is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract?

*A ‘snowflake’ cataract*

How does a snowflake cataract present initially?

With the abrupt appearance of subcapsular grayish-white opacities

As it progresses, how does its appearance change?

It becomes a completely opacified white cortical cataract

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?

They don’t; rather, DM seems to cause age-related cataracts to occur at an earlier age

Do they tend to occur unilaterally, or bilaterally?

Bilaterally

How do diabetes-related NSCs, cortical cataracts, and PSCs differ from those associated with age?
Cataracts: The Big Three

What are the three age-related types of cataracts?

There is a DM-related cataract which is not simply an early-onset version of a senescent cataract. What is the weather-related name of this special form of cataract? A ‘snowflake’ cataract

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For each risk factor, identify which type of cataract it is associated with (some will be associated with more than one):

- **Diabetes mellitus**
Cataracts: The Big Three

For each statement, identify the associated type of cataract:
- nuclear sclerotic (NSC)
- cortical
- posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon:
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
Associated with the **second sight** phenomenon: **NSC**

**What is the second sight phenomenon?**
Associated with the *second sight* phenomenon: **NSC**

**What is the *second sight* phenomenon?**
NSC progression often produces lenticular myopia. In some patients this myopia rehabilitates the near vision loss they experienced due to presbyopia, thus restoring the ability to read without glasses.
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status:
A

Cataracts: The Big Three

For each statement, identify the associated type of cataract:
nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision:
Associated with the *second sight* phenomenon: **NSC**

Related to lens hydration status: **Cortical**

Affects scotopic > photopic vision: **NSC**
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision:
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC

Define these terms:
*Scotopic:* Related to vision in…
*Photopic:* Related to vision in…
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC

**Define these terms:**
- *Scotopic*: Related to vision in… *dim illumination*
- *Photopic*: Related to vision in… *bright illumination*
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the second sight phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC

Define these terms:
- Scotopic: Related to vision in…dim illumination
- Photopic: Related to vision in…bright illumination

What is the term describing vision under low (e.g., twilight) illumination conditions?
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC

*Define these terms:*

- **Scotopic**: Related to vision in… *dim illumination*
- **Photopic**: Related to vision in… *bright illumination*

*What is the term describing vision under low (e.g., twilight) illumination conditions?*

**Mesopic** vision
For each statement, identify the associated type of cataract:

- nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision:
A

For each statement, identify the associated type of cataract:
- nuclear sclerotic (NSC);
- cortical;
- posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the second sight phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC
- Affects near > distance vision: PSC

Photopic vision, near vision--what do these have in common?
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the second sight phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- **Affects photopic > scotopic vision: PSC**
- Affects near > distance vision: PSC

Photopic vision, near vision--what do these have in common?
Pupillary miosis
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- **Affects photopic > scotopic vision: PSC**
- Affects near > distance vision: PSC

*Photopic vision, near vision--what do these have in common?*
- Pupillary miosis

*Why is vision through a PSC worse when the pupil is miosed?*
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- **Affects photopic > scotopic vision:** PSC
- Affects near > distance vision: PSC

*Photopic vision, near vision--what do these have in common?*
Pupillary miosis

*Why is vision through a PSC worse when the pupil is miosed?*
PSCs tend to be centrally located. Thus, when the pupil is dilated, incoming light can ‘go around’ the PSC, and vision is less affected. But when the pupil is miosed, incoming light is limited to that which is passing through the densest portion of the PSC, and thus results in maximally-degraded visual acuity.
For each statement, identify the associated type of cataract:

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
- Associated with monocular diplopia:
For each statement, identify the associated type of cataract:
- nuclear sclerotic (NSC);
- cortical;
- posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
- Associated with monocular diplopia: **All**
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
- Associated with monocular diplopia: **All**
- Most likely to c/o glare:
Cataracts: The Big Three

For each statement, identify the associated type of cataract:
nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
- Associated with monocular diplopia: **All**
- Most likely to c/o glare: **Cortical**
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: NSC
- Related to lens hydration status: Cortical
- Affects scotopic > photopic vision: NSC
- Affects photopic > scotopic vision: PSC
- Affects near > distance vision: PSC
- Associated with monocular diplopia: All
- Most likely to c/o glare: Cortical
- Least likely to c/o glare:
For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
- Affects photopic > scotopic vision: **PSC**
- Affects near > distance vision: **PSC**
- Associated with monocular diplopia: **All**
- Most likely to c/o glare: **Cortical**
- Least likely to c/o glare: **NSC**
Cataracts: The Big Three

For each statement, identify the associated type of cataract: nuclear sclerotic (NSC); cortical; posterior subcapsular (PSC)

- Associated with the *second sight* phenomenon: **NSC**
- Related to lens hydration status: **Cortical**
- Affects scotopic > photopic vision: **NSC**
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- Most likely in a younger adult:
Cataracts: The Big Three

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- Gives rise to Morgagnian cataract:
For each statement, identify the associated type of cataract:

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- Most likely in a younger adult: PSC
- Most likely to c/o glare: Cortical
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What is a **Morgagnian cataract**?
Cataracts: The Big Three

For each statement, identify the associated type of cataract:
- nuclear sclerotic (NSC)
- cortical
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- Most likely to c/o glare: Cortical
- Least likely to c/o glare: NSC
- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical

What is a Morgagnian cataract?
An end-stage cortical cataract in which the cataractous cortical material has completely liquefied. A concomitant (usually brown) NSC will sink to the bottom of the capsular bag.
What are the first manifestations of a cortical cataract?

- Most likely in a younger adult: PSC
- Gives rise to **Morgagnian cataract**: Cortical
A/Q

Cataracts: The Big Three

What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens.

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
**Cataracts: The Big Three**

What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

<table>
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<th>Possible Cataract Types</th>
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Most likely in a younger adult: PSC
Gives rise to **Morgagnian cataract**: Cortical
Cataracts: The Big Three

Early cortical cataract
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?

- Most likely in a younger adult: PSC
- Gives rise to **Morgagnian cataract**: Cortical
A/Q

Cataracts: The Big Three

What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (called…(two words)) at the lens periphery

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications ('cortical spokes') at the lens periphery

Most likely in a younger adult: PSC

Gives rise to Morgagnian cataract: Cortical
Cataracts: The Big Three

Cortical cataract: Early spokes

Direct illumination

Retroillumination
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (‘cortical spokes’) at the lens periphery

Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens.

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (‘cortical spokes’) at the lens periphery.

Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?
A mature cataract.

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
Cataracts: The Big Three

Cortical cataract: Mature
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens.

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Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?
A mature cataract.

Occasionally, a mature candidate will absorb a clinically significant amount of water. What is the name for such a cataract?

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
Cataracts: The Big Three

What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (‘cortical spokes’) at the lens periphery

Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?
A mature cataract

Occasionally, a mature candidate will absorb a clinically significant amount of water. What is the name for such a cataract?
An intumescent cataract

Most likely in a younger adult: PSC

Gives rise to Morgagnian cataract: Cortical
Cataracts: The Big Three

Intumescent cataract
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (‘cortical spokes’) at the lens periphery

Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?
A mature cataract

Occasionally, a mature candidate will absorb a clinically significant amount of water. What is the name for such a cataract?
An intumescent cataract

Occasionally, the cortical material of an intumescent or mature cortical cataract will begin to degenerate and leach through the lens capsule. The accompanying loss of cataract mass will leave the anterior capsule with a wrinkled appearance. What is the name for such a cataract?

Cataracts: The Big Three

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
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A hypermature cataract

- Most likely in a younger adult: PSC
- Gives rise to Morgagnian cataract: Cortical
Cataracts: The Big Three

Hypermature cataract
What are the first manifestations of a cortical cataract?
The presence of water clefts and vacuoles in the cortical region of the lens

What manifestation typically follows water clefts and vacuoles?
The appearance of wedge-shaped opacifications (‘cortical spokes’) at the lens periphery

Eventually, these spokes will turn white and comprise the entire lens. What is the name for such a cataract?
A mature cataract

Occasionally, a mature candidate will absorb a clinically significant amount of water. What is the name for such a cataract?
An intumescent cataract

Occasionally, the cortical material of an intumescent or mature cortical cataract will begin to degenerate and leach through the lens capsule. The accompanying loss of cataract mass will leave the anterior capsule with a wrinkled appearance. What is the name for such a cataract?
A hypermature cataract

Occasionally, the entire hypermature cataract liquefies, leaving only a wrinkled bag with an NSC resting at its bottom. What is the name for such a cataract?

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A hypermature cataract

Occasionally, the entire hypermature cataract liquefies, leaving only a wrinkled bag with an NSC resting at its bottom. What is the name for such a cataract?
A Morgagnian cataract
Cataracts: The Big Three

Morgagnian cataract