Divide the lesions into their respective categories

**Retinal Lesions**

...Predisposing to RD  ...NOT Predisposing to RD

- Lattice
- Cobblestone degeneration
  - Vitreoretinal tufts
  - Meridional folds
  - RPE hyperplasia
- Enclosed ora bays
- RPE hypertrophy
- Peripheral cystoid degeneration
Before we start, some background info. What are the three classes of retinal detachment (RD)?

Retinal Lesions...

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Exudative, tractional and rhegmatogenous

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Before we start, some background info. What are the three classes of retinal detachment (RD)?

**Exudative, tractional** and **rhegmatogenous**

Looking over the list of lesions above, which of the three is this slide-set concerned with?

**Retinal Lesions…**

…Predisposing to RD

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Before we start, some background info. What are the three classes of retinal detachment (RD)? Exudative, tractional and rhegmatogenous

Looking over the list of lesions above, which of the three is this slide-set concerned with? Rhegmatogenous
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...Predisposing to RD

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...NOT Predisposing to RD

(OK, now start here and work your way down the list, placing each in the appropriate column)

Divide the lesions into their respective categories
Retinal Lesions…

...Predisposing to RD

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--Actually prevents RD extension
--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction
--Present in 100% of adults >20 y.o.
--Spiculated appearance
--Islands of pars plana epithelium surrounded by retina
--Redundant linear retinal elevations
A

Retinal Lesions: Matching

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How common is lattice degeneration?

Quite common, found in 5-10% of the population

Is it more common in myopic or hyperopic eyes?

Myopic

Is it sporadic or familial?

While not inevitable, a familial predisposition is often found

Lattice

Cobblestone pattern of lattice degeneration

Vitreoretinal tufts

-- Black and flat

Meridional folds

-- Small peripheral retinal elevations

--- 2° to vitreous or zonular traction

RPE hyperplasia

-- Present in 100% of adults >20

Enclosed ora bays

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RPE hypertrophy

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Lattice degeneration

- Cobblestone appearance
- Vitreoretinal tufts -- Black and flat
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How common is lattice degeneration?
Quite--it is found in 5-10% of the population
When present, how likely is lattice to be bilateral?

Retinal Lesions: Matching

Q

How common is lattice degeneration?
Quite--it is found in 5-10% of the population

When present, how likely is lattice to be bilateral?

Lattice

--Lattice

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How common is lattice degeneration?
Quite--it is found in 5-10% of the population

When present, how likely is lattice to be bilateral?
Quite--it is bilateral in % to % of lattice pts

Lattice

Retinal Lesions: Matching

A/Q
How common is lattice degeneration?
Quite—it is found in 5-10% of the population

When present, how likely is lattice to be bilateral?
Quite—it is bilateral in 1/3 to 1/2 of lattice pts

Vitreoretinal tufts
--Black and flat

Meridional folds
--Small peripheral retinal elevations 2° to vitreous or zonular traction

RPE hyperplasia
--Present in 100% of adults >20

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Retinal Lesions: Matching

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### Retinal Lesions: Matching

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- **Lattice**: Black and flat
- **Cobblestone degeneration**: RD usually 2° to tractional tear at postérieur of lesion
- **Vitreoretinal tufts**: --Small peripheral retinal elevations 2° to vitreous or zonular traction
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- **RPE hyperplasia**: --Spiculated appearance
- **Enclosed ora bays**: --Islands of pars plana epithelium surrounded by retina
- **RPE hypertrophy**: --Redundant linear retinal elevations
Lattice degeneration: Note the retinal thinning, which is characterized by a color change. There are also pigment clumps and crosshatching of sclerotic vessels.
Lattice degeneration appears clinically as prominent sclerotic vessels (*arrows*) in a wicker or lattice pattern.
There are three clinically important aspects to the structure of lattice degeneration—what are they?

1) A focal area of retina for which the internal limiting membrane is missing;
2) a pocket of liquefied vitreous overlying this retinal lesion; and
3) abnormally firm adhesion between the edges of the retina lesion and the walls of the overlying pocket of liquefied vitreous.

Retinal tears (with subsequent rhegmatogenous RD can result from traction on these abnormal vitreo-retinal adhesions.

---

Lattice

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Enclosed ora bays

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**Q/A**

**Retinal Lesions: Matching**

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The vitreous directly over the lattice degeneration is liquefied (asterisk), but formed vitreous remains adherent at the margins (arrowheads) of the degenerated area. The internal limiting membrane is discontinuous, and the inner retinal layers are atrophic.
Figure 16-3  Lattice degeneration. A, Color fundus photograph of lattice degeneration as viewed without scleral indentation. Vascular sheathing is apparent where the vessel crosses the area of lattice. Characteristic white lattice lines are visible. B, Color fundus photograph of another example of lattice degeneration demonstrates associated hyperpigmentation, which is commonly observed. (Part A used with permission from Byer NE. Peripheral Retina in Profile: A Stereoscopic Atlas. Torrance, CA: Criterion Press; 1982.)
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Retinal tears (with subsequent rhegmatogenous RD) can result from traction on these abnormal vitreo-retinal adhesions.
Retinal tear at the posterior edge of lattice degeneration
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
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- RPE hypertrophy
  - Islands of pars plana epithelium surrounded by retina

- Peripheral cystoid degeneration
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What is the ophthalmoscopic appearance of cobblestone (aka paving-stone) degeneration?

Small discrete white/yellow areas, often with a thin rim of hypertrophic RPE. The areas are often closely confluent (hence their harkening to the appearance of cobble- or paving-stones). They are found anterior to the equator, often close to the ora.

What is the histological essence of cobblestone degeneration?

They are focal areas of atrophic outer retina/RPE/choriocapillaris. The remaining retinal layers are fused to the underlying Bruch’s membrane.

How do they prevent extension of an RD?

Because they involve fusion of the neurosensory retina to Bruch’s, they do not allow liquid vitreous to proceed through their location.

Retinal Lesions: Matching

Lattice

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RPE hypertrophy
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Figure 16-10  Gross appearance of paving-stone degeneration. (Used with permission from Green WR. Pathology of the retina. In: Frayer WC, ed. Lancaster Course in Ophthalmic Histopathology, unit 9, Philadelphia: FA Davis; 1988:181.)
**Retinal Lesions: Matching**

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**What is the ora serrata?**
The junction between the peripheral retina and the pars plana of the ciliary body.
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Ora serrata

Peripheral retina

Pars plana of ciliary body
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**What is the histological essence of cobblestones?**
Focal areas of atrophic outer retina/RPE/choriocapillaris. The remaining retinal layers are fused to the underlying Bruch’s membrane.

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Peripheral cystoid degeneration --Redundant linear retinal elevations
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Vitreoretinal tufts are known also by what name?

Peripheral retinal tufts

They are highly focal areas of glial hyperplasia firmly attached to both the vitreous face/zonules and the retina. Because of the strength of these attachments, traction arising in the vitreous (or zonules) will elevate the retina. If sufficient traction is applied, the retina will break, resulting in a hole or horseshoe tear.

There are three subtypes of vitreoretinal tufts, one of which bridges between the retina and the zonules, not vitreous.
Vitreoretinal tufts are known also by what name?  
Peripheral retinal tufts
Vitreoretinal tufts are known also by what name?
Peripheral retinal tufts

What are vitreoretinal tufts composed of?

Vitreoretinal tufts are highly focal areas of glial hyperplasia firmly attached to both the vitreous face/zonules and the retina. Because of the strength of these attachments, traction arising in the vitreous (or zonules) will elevate the retina. If sufficient traction is applied, the retina will break, resulting in a hole or horseshoe tear.

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--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction
Vitreoretinal tufts are known also by what name?
Peripheral retinal tufts

What are vitreoretinal tufts composed of?
They are highly focal areas of glial hyperplasia firmly attached to both the vitreous face/zonules and the retina. Because of the strength of these attachments, traction arising in the vitreous (or zonules) will elevate the retina. If sufficient traction is applied, the retina will break, resulting in a hole or horseshoe tear.
Figure 16-7  Color photograph of a gross eye specimen shows a cluster of white surface nodules with characteristic gross appearance and location of noncystic retinal tufts. (Used with permission from Foos RY, Silverstein RN, eds. System of Ocular Pathology. Vol. 3. Los Angeles: iPATH Press; 2004.)
Vitreoretinal tufts are known also by what name?
Peripheral retinal tufts

What are vitreoretinal tufts composed of?
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Wait—both the Matching answer and the one above referenced zonules. What gives?
Vitreoretinal tufts are known also by what name?
Peripheral retinal tufts

What are vitreoretinal tufts composed of?
They are highly focal areas of glial hyperplasia firmly attached to both the vitreous face/zonules and the retina. Because of the strength of these attachments, traction arising in the vitreous (or zonules) will elevate the retina. If sufficient traction is applied, the retina will break, resulting in a hole or horseshoe tear.

Wait—both the Matching answer and the one above referenced zonules. What gives?
There are three subtypes of vitreoretinal tufts, one of which bridges between the retina and the zonules, not vitreous.
Color photo of a gross eye specimen shows a small zonular traction tuft (arrow) with cystic base. Note that the tuft points anteriorly toward the peripheral lens.
**Retinal Lesions: Matching**

- **Lattice**
  - Actually prevents RD extension

- **Cobblestone degeneration**
  - RD usually 2° to tractional tear at posterior edge of lesion

- **Vitreoretinal tufts**
  - Black and flat

- **Meridional folds**
  - Small peripheral retinal elevations 2° to vitreous or zonular traction

- **RPE hyperplasia**
  - Present in 100% of adults >20 y.o.

- **Enclosed ora bays**
  - Spiculated appearance

- **RPE hypertrophy**
  - Islands of pars plana epithelium surrounded by retina

- **Peripheral cystoid degeneration**
  - Redundant linear retinal elevations
**Retinal Lesions: Matching**

- **Lattice**
  - Actually prevents RD extension

- **Cobblestone degeneration**
  - RD usually 2° to tractional tear at posterior edge of lesion

- **Vitreoretinal tufts**
  - Black and flat

- **Meridional folds**
  - Small peripheral retinal elevations 2° to vitreous or zonular traction

- **RPE hyperplasia**

- **Enclosed ora bays**

- **RPE hypertrophy**

- **Peripheral cystoid degeneration**
  - Present in 100% of adults >20 y.o.
  - Spiculated appearance
  - Islands of pars plana epithelium surrounded by retina
  - Redundant linear retinal elevations
How are meridional folds oriented?

Anterior-posterior. Think of them as 'ridges of retina' that start at the ora and run posteriorly a millimeter or two.

With what common (at the ora) retinal finding are they associated?

Dentate processes

How do they increase the risk of an RD?

The vitreous base straddles these structures, and post-PVD traction at the posterior end of the fold can lead to a horseshoe tear.
How are meridional folds oriented?
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

- Lattice
  - Actually prevents RD extension
- Cobblestone degeneration
- Vitreoretinal tufts
  - Black and flat
- Meridional folds
  - Small peripheral retinal elevations 2° to vitreous or zonular traction
- Peripheral systolic degeneration
  - Redundant linear retinal elevations
How are meridional folds oriented?
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

With what common (at the ora) retinal findings are they associated?

--Actually prevents RD extension
--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction

Meridional folds

Lattice
Cobblestone degeneration
Vitreoretinal tufts
Peripheral systolic degeneration

Retinal Lesions: Matching
A

Retinal Lesions: Matching

Lattice
- Actually prevents RD extension

Cobblestone degeneration
- RD usually 2° to tractional tear at posterior edge of lesion

Vitreoretinal tufts
- Black and flat

Meridional folds
- Small peripheral retinal elevations 2° to vitreous or zonular traction

How are meridional folds oriented?
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

With what common (at the ora) retinal findings are they associated?
Dentate processes and ora bays

Peripheral systolic degeneration
- Redundant linear retinal elevations
**Retinal Lesions: Matching**

- **Lattice**
  - Cobblestone degeneration
  - Vitreoretinal tufts
  - Meridional folds
  - RPE hyperplasia
  - Enclosed ora bays
  - RPE hypertrophy
- **Peripheral cystoid degeneration**
  - Actually prevents RD extension
  - RD usually 2º to tractional tear at posterior edge of lesion
  - Black and flat
  - Small peripheral retinal elevations 2º to vitreous or zonular traction

---

**Meridional Folds**

- Anterior-posterior. Think of them as 'ridges of retina' that start at the ora and run posteriorly a millimeter or two.

**With what common (at the ora) retinal finding are they associated?**

- Dentate processes and ora bays

**Dentate processes**

- Look like very pointy teeth (hence the word *dentate* or *dental*).

---

**Peripheral cystoid degeneration**

- Redundant linear retinal elevations
Lattice --Actually prevents RD extension

Cobblestone degeneration --RD usually 2° to tractional tear at posterior edge of lesion

Vitreoretinal tufts --Black and flat

Meridional folds --Small peripheral retinal elevations 2° to vitreous or zonular traction

RPE hyperplasia

Enclosed ora bays

Peripheral cystoid degeneration

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How are meridional folds oriented? Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

How do they increase the risk of an RD? The vitreous base straddles these structures, and post-PVD traction at the posterior end of the fold can lead to a horseshoe tear.

With what common (at the ora) retinal finding are they associated? Dentate processes and ora bays

Dentate processes look like very pointy teeth (hence the word dentate)

Ora bays look like inlets of water (hence the word bay)

Ora bays

Pars plana of the ciliary body

Perforerial retina

Peripheral cystoid degeneration --Redundant linear retinal elevations
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
Enclosed ora bays
RPE hypertrophy
Peripheral cystoid degeneration

--Actually prevents RD extension
--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction
--Present in 100% of adults >20 y.o.
--Spiculated appearance
--Islands of pars plana epithelium surrounded by retina
--Redundant linear retinal elevations

How are meridional folds oriented?
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

With what common (at the ora) retinal finding are they associated?
Dentate processes and ora bays

Ora bays look like inlets of water (hence the word bay)

Meridional folds are elevated ridges of retina within a dentate process

Dentate processes look like very pointy teeth (hence the word dentate)

Peripheral systolic degeneration

Ora bays
Meridional fold
Dentate processes
Pars plana of the ciliary body
Peripheral retina

Retinal Lesions: Matching
Meridional fold (large white arrow)

Dentate process

Ora bay
**Meridional folds**

*How are meridional folds oriented?*
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

*With what common (at the ora) retinal findings are they associated?*
Dentate processes and ora bays

*How do meridional folds increase the risk of an RD?*

Peripheral systolic degeneration

--Actually prevents RD extension

Lattice

Cobblestone degeneration

Vitreoretinal tufts

--RD usually 2° to tractional tear at posterior edge of lesion

--Black and flat

--Small peripheral retinal elevations 2° to vitreous or zonular traction

--Redundant linear retinal elevations
Lattice

Cobblestone degeneration

Vitreoretinal tufts

**Meridional folds**

--- Actually prevents RD extension

-- RD usually 2° to tractional tear at posterior edge of lesion

-- Black and flat

-- Small peripheral retinal elevations 2° to vitreous or zonular traction

**How are meridional folds oriented?**
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

**With what common (at the ora) retinal findings are they associated?**
Dentate processes and ora bays

**How do meridional folds increase the risk of an RD?**
The vitreous base straddles these structures, and post-PVD traction at the end of the fold can lead to a horseshoe tear.

--- Redundant linear retinal elevations
Lattice --Actually prevents RD extension
Cobblestone degeneration --RD usually 2° to tractional tear at posterior edge of lesion
Vitreoretinal tufts
Meridional folds --Small peripheral retinal elevations 2° to vitreous or zonular traction

How are meridional folds oriented?
Anterior-posterior. Think of them as ‘ridges of retina’ that start at the ora and run posteriorly a millimeter or two.

With what common (at the ora) retinal findings are they associated?
Dentate processes and ora bays

How do meridional folds increase the risk of an RD?
The vitreous base straddles these structures, and post-PVD traction at the posterior end of the fold can lead to a horseshoe tear

Peripheral cystoid degeneration --Redundant linear retinal elevations
Lattice

Cobblestone degeneration

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Actually prevents RD extension

--RD usually 2° to tractional tear at posterior edge of lesion

--Black and flat

--Small peripheral retinal elevations 2° to vitreous or zonular traction

--Present in 100% of adults >20 y.o.

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina

--Redundant linear retinal elevations
Retinal Lesions: Matching

- Lattice
  -- Actually prevents RD extension

- Cobblestone degeneration
  -- RD usually 2° to tractional tear at posterior edge of lesion

- Vitreoretinal tufts
  -- Black and flat

- Meridional folds
  -- Small peripheral retinal elevations 2° to vitreous or zonular traction

- RPE hyperplasia
  -- Present in 100% of adults >20 y.o.
  -- Spiculated appearance
  -- Islands of pars plana epithelium surrounded by retina
    -- Redundant linear retinal elevations

- Enclosed ora bays

- RPE hypertrophy

- Peripheral cystoid degeneration
Retinal Lesions: Matching

- Lattice
  -- Actually prevents RD extension

- Cobblestone degeneration
  -- RD usually 2° to tractional tear at posterior edge of lesion

- Vitreoretinal tufts
  -- Black and flat

- Meridional folds
  -- Small peripheral retinal elevations 2° to vitreous or zonular traction

- RPE hyperplasia
  -- Present in 100% of adults >20 y.o.
  -- Spiculated appearance
  -- Islands of pars plana epithelium surrounded by retina
  -- Redundant linear retinal elevations

- Enclosed ora bays
  ?

- RPE hypertrophy

- Peripheral cystoid degeneration
Lattice --Actually prevents RD extension
Cobblestone degeneration --RD usually 2° to tractional tear at posterior edge of lesion
Vitreoretinal tufts --Black and flat
Meridional folds --Small peripheral retinal elevations 2° to vitreous or zonular traction
RPE hyperplasia --Present in 100% of adults >20 y.o.
Enclosed ora bays --Spiculated appearance
RPE hypertrophy --Islands of pars plana epithelium surrounded by retina
Peripheral cystoid degeneration --Redundant linear retinal elevations
How does an enclosed ora bay differ from the sort we encountered previously?

It differs in that it is 'cut off' from the rest of the pars plana by retina.

How do enclosed ora bays increase the risk of an RD?

The vitreous base straddles these structures, and post-PVD traction on the retina at the posterior end of the bay can lead to a tear.
How does an enclosed ora bay differ from the sort we encountered previously? It differs in that it is ‘cut off’ from the rest of the pars plana by retina.

- Present in 100% of adults >20 y.o.
- Spiculated appearance
- Islands of pars plana epithelium surrounded by retina
- Redundant linear retinal elevations

Enclosed ora bays

Ora bays

Pars plana of the ciliary body

Peripheral retina
Enclosed ora bay (asterisk)
Retinal Lesions: Matching

Lattice
- Actually prevents RD extension

Cobblestone degeneration
- RD usually 2° to tractional tear at posterior edge of lesion

Vitreoretinal tufts
- Present in 100% of adults >20 y.o.
- Spiculated appearance

Enclosed ora bays
- Islands of pars plana epithelium surrounded by retina
- Redundant linear retinal elevations

How does an enclosed ora bay differ from the sort we encountered previously?
- It differs in that it is ‘cut off’ from the rest of the pars plana by retina

How do enclosed ora bays increase the risk of an RD?
- Post-PVD traction on the retina at the posterior end of the bay can lead to a tear
Lattice --Actually prevents RD extension
Cobblestone degeneration --RD usually 2° to tractional tear at posterior edge of lesion
Vitreoretinal tufts

How does an enclosed ora bay differ from the sort we encountered previously?
It differs in that it is ‘cut off’ from the rest of the pars plana by retina

How do enclosed ora bays increase the risk of an RD?
The vitreous base straddles these structures, and post-PVD traction on the retina at the end of the bay can lead to a tear

Enclosed ora bays
RPE hypertrophy --Islands of pars plana epithelium surrounded by retina
Peripheral cystoid degeneration --Redundant linear retinal elevations

Anterior vs posterior
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
Enclosed ora bays
Peripheral cystoid degeneration

---Actually prevents RD extension
---RD usually 2° to tractional tear at posterior edge of lesion

**How does an enclosed ora bay differ from the sort we encountered previously?**
It differs in that it is ‘cut off’ from the rest of the pars plana by retina

**How do enclosed ora bays increase the risk of an RD?**
The vitreous base straddles these structures, and post-PVD traction on the retina at the posterior end of the bay can lead to a tear
Lattice
--Actually prevents RD extension

Cobblestone degeneration
--RD usually 2º to tractional tear at posterior edge of lesion

Vitreoretinal tufts
--Black and flat

Meridional folds
--Small peripheral retinal elevations 2º to vitreous or zonular traction

RPE hyperplasia
--Present in 100% of adults >20 y.o.

Enclosed ora bays
--Spiculated appearance

RPE hypertrophy
--Islands of pars plana epithelium surrounded by retina

Peripheral cystoid degeneration
--Redundant linear retinal elevations
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
Enclosed ora bays

RPE hypertrophy
Peripheral cystoid degeneration

---Actually prevents RD extension
---RD usually 2° to tractional tear at posterior edge of lesion
---Black and flat
---Small peripheral retinal elevations 2° to vitreous or zonular traction
---Present in 100% of adults >20 y.o.
---Spiculated appearance
---Islands of pars plana epithelium surrounded by retina
---Redundant linear retinal elevations
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
Enclosed ora bays
RPE hypertrophy
Peripheral cystoid degeneration

--Actually prevents RD extension
--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction
--Present in 100% of adults >20 y.o.
--Spiculated appearance
--Islands of pars plana epithelium surrounded by retina
--Redundant linear retinal elevations
Retinal Lesions: Matching

- Lattice
  --Actually prevents RD extension
- Cobblestone degeneration
- Vitreoretinal tufts
  --Black and flat
- Meridional folds
  --Small peripheral retinal elevations 2° to vitreous or zonular traction
- RPE hyperplasia
  --Present in 100% of adults >20 y.o.
- Enclosed ora bays
  --Spiculated appearance
- RPE hypertrophy
  --Islands of pars plana epithelium surrounded by retina
- Peripheral cystoid degeneration
  --Redundant linear retinal elevations
Peripheral cystoid degeneration
Lattice
Cobblestone degeneration
Vitreoretinal tufts
Meridional folds
RPE hyperplasia
Enclosed ora bays

There are two subtypes of peripheral cystoid degeneration—what are they?
--- peripheral cystoid degeneration
--- peripheral cystoid degeneration

Peripheral cystoid degeneration

--Actually prevents RD extension
--RD usually 2° to tractional tear at posterior edge of lesion
--Black and flat
--Small peripheral retinal elevations 2° to vitreous or zonular traction
--Present in 100% of adults >20 y.o.

Redundant linear retinal elevations
Islands of pars plana epithelium surrounded by retina

Retinal Lesions: Matching
Retinal Lesions: Matching

There are two subtypes of peripheral cystoid degeneration—what are they?
-- Typical peripheral cystoid degeneration
-- Reticular peripheral cystoid degeneration

Peripheral cystoid degeneration

- Lattice
  -- Actually prevents RD extension

- Cobblestone degeneration
  -- RD usually 2° to tractional tear at posterior edge of lesion

- Vitreoretinal tufts
  -- Black and flat

- Meridional folds
  -- Small peripheral retinal elevations 2° to vitreous or zonular traction

- RPE hyperplasia
  -- Present in 100% of adults >20 y.o.

- Enclosed ora bays
  -- Islands of pars plana epithelium surrounded by retina
  -- Redundant linear retinal elevations
There are two subtypes of peripheral cystoid degeneration—what are they?

- *Typical peripheral cystoid degeneration?*
- *Reticular peripheral cystoid degeneration?*

*Which form is present in 100% of 20+ individuals?*

- Typical peripheral cystoid degeneration
- Reticular peripheral cystoid degeneration

*Retinal Lesions: Matching*

- Lattice: Actually prevents RD extension
- Cobblestone degeneration: RD usually secondary to tractional tear at posterior edge of lesion
- Vitreoretinal tufts: Black and flat, small peripheral retinal elevations secondary to vitreous or zonular traction
- Enclosed ora bays: Present in 100% of adults >20 y.o.
- RPE hypertrophy: Redundant linear retinal elevations
- *Peripheral cystoid degeneration*
Retinal Lesions: Matching

There are two subtypes of peripheral cystoid degeneration—what are they?

- **Typical** peripheral cystoid degeneration
- Reticular peripheral cystoid degeneration

Which form is present in 100% of 20+ individuals?
Typical (that’s why it’s called ‘typical’)

- Enclosed ora bays
- Black and flat
- --Present in 100% of adults >20 y.o.

Peripheral cystoid degeneration

- Lattice
- Cobblestone degeneration
- --Actually prevents RD extension
- Cobblestone degeneration
- --RD usually 2° to tractional tear at posterior edge of lesion
- Vitreoretinal tufts
- --Black and flat
- --Small peripheral retinal elevations 2° to vitreous or zonular traction
- RPE hypertrophy
- --Redundant linear retinal elevations
- RPE hyperplasia
- Enclosed ora bays
- --Present in 100% of adults >20 y.o.

Meridional folds

Enclosed ora bays

--Actually prevents RD extension

Enclosed ora bays

--RD usually 2° to tractional tear at posterior edge of lesion

Vitreoretinal tufts

--Black and flat

Vitreoretinal tufts

--Small peripheral retinal elevations 2° to vitreous or zonular traction

RPE hypertrophy
**Retinal Lesions: Matching**

**Q**

Lattice

Cobblestone degeneration

--Actually prevents RD extension

Vitreoretinal tufts

--RD usually 2° to tractional tear at posterior edge of lesion

Enclosed ora bays

--Black and flat

RPE hyperplasia

--Small peripheral retinal elevations 2° to vitreous or zonular traction

Peripheral cystoid degeneration

--Present in 100% of adults >20 y.o.

Which form is present in 100% of 20+ individuals? Typical (that’s why it’s called ‘typical’)

Where is typical cystoid degeneration found?

There are two subtypes of peripheral cystoid degeneration—what are they?

-- **Typical** peripheral cystoid degeneration

-- Reticular peripheral cystoid degeneration

Islands of pars plana epithelium surrounded by retina

--Redundant linear retinal elevations

Typical peripheral cystoid degeneration

--Present in 100% of adults >20 y.o.
Lattice

Cobblestone degeneration

Vitreoretinal tufts

---Actually prevents RD extension
---RD usually 2° to tractional tear at posterior edge of lesion
---Black and flat
---Small peripheral retinal elevations 2° to vitreous or zonular traction

Enclosed ora bays

---Present in 100% of adults >20 y.o.

---Islands of pars plana epithelium surrounded by retina
---Redundant linear retinal elevations

Peripheral cystoid degeneration

There are two subtypes of peripheral cystoid degeneration—what are they?
--- **Typical** peripheral cystoid degeneration
--- Reticular peripheral cystoid degeneration

Which form is present in 100% of 20+ individuals? Typical (that’s why it’s called ‘typical’)

Where is typical cystoid degeneration found?
In the far periphery—it starts at the ora and extends several millimeters posteriorly

Retinal Lesions: Matching
Retinal Lesions: Matching

Typical peripheral cystoid degeneration. (A) Ultra-widefield pseudocolor image (B) High-magnification view (C) Near-Infrared reflectance image (D) SD-OCT
Retinal Lesions: Matching

- Lattice
  - Actually prevents RD extension
- Cobblestone degeneration
  - RD usually 2° to tractional tear at posterior edge of lesion
- Vitreoretinal tufts
  - Black and flat
  - Small peripheral retinal elevations 2° to vitreous or zonular traction
  - Present in 100% of adults >20 y.o.
- RPE hyperplasia
  - Islands of pars plana epithelium surrounded by retina
  - Redundant linear retinal elevations

There are two subtypes of peripheral cystoid degeneration—what are they?
- Typical peripheral cystoid degeneration—what are they?
  - Reticular peripheral cystoid degeneration
- Which form is present in 100% of 20+ individuals?
  - Typical (that’s why it’s called ‘typical’)

How prevalent is reticular cystoid degeneration?
- It is found in ~20% of adults
- Where is typical cystoid degeneration located?
  - It is always adjacent and just posterior to a section of the ‘typical’ form
Retinal Lesions: Matching

Lattice
- Actually prevents RD extension

Cobblestone degeneration
- RD usually 2° to tractional tear at posterior edge of lesion

Vitreoretinal tufts
- Black and flat
- Small peripheral retinal elevations 2° to vitreous or zonular traction

Which form is present in 100% of 20+ individuals?
Typical (that’s why it’s called ‘typical’)

How prevalent is reticular cystoid degeneration?
It is found in ~20% of adults

RPE
- Reticular peripheral cystoid degeneration

Which form is present in 100% of adults >20 y.o.?
Typical peripheral cystoid degeneration

Peripheral cystoid degeneration
- Present in 100% of adults >20 y.o.
- Redundant linear retinal elevations
- Islands of pars plana epithelium surrounded by retina
- Spiculated appearance

Where is typical cystoid degeneration located?
It is always adjacent and just posterior to a section of the ‘typical’ form

Where is typical cystoid degeneration found?
In the far periphery—it starts at the ora and extends several millimeters posteriorly
Retinal Lesions: Matching

There are two subtypes of peripheral cystoid degeneration—what are they?

- Typical peripheral cystoid degeneration
- Reticular peripheral cystoid degeneration

Which form is present in 100% of 20+ individuals?
Typical (that’s why it’s called ‘typical’)

How prevalent is reticular cystoid degeneration?
It is found in ~20% of adults

Where is reticular cystoid degeneration located?
- Present in 100% of adults >20 y.o.
- Typical peripheral cystoid degeneration
- Reticular peripheral cystoid degeneration

Vitreoretinal tufts
- Black and flat
- Small peripheral retinal elevations 2° to vitreous or zonular traction

Lattice
- Actually prevents RD extension
- RD usually 2° to tractional tear at posterior edge of lesion

Cobblestone degeneration

Peripheral cystoid degeneration
- Redundant linear retinal elevations
- Segments of retinal epithelium surrounded by retina
Retinal Lesions: Matching

Lattice

Cobblestone degeneration

Vitreoretinal tufts

--Actually prevents RD extension

--RD usually 2° to tractional tear at posterior edge of lesion

--Black and flat

--Small peripheral retinal elevations 2° to vitreous or zonular traction

--Present in 100% of adults >20 y.o.

RPE

-- Typical peripheral cystoid degeneration

-- Reticular peripheral cystoid degeneration

RPE islands surrounded by retina

--Redundant linear retinal elevations

Which form is present in 100% of 20+ individuals?
Typical (that’s why it’s called ‘typical’)

How prevalent is reticular cystoid degeneration?
It is found in ~20% of adults

Where is reticular cystoid degeneration located?
It is always adjacent and just posterior to a section of the ‘typical’ form

There are two subtypes of peripheral cystoid degeneration—what are they?

-- Typical peripheral cystoid degeneration--

Reticular peripheral cystoid degeneration

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Typical and reticular cystoid degeneration
Typical peripheral cystoid degeneration consists of cystoid spaces in the outer plexiform layer (asterisk) on the lower left (anterior retina). In the upper right (posterior retina), reticular peripheral cystoid degeneration (arrow) is present.
What is a retinal dialysis?

What is a retinal Dialysis?

Horseshoe tear

Operculated hole

Atrophic hole

Lattice
**What is a retinal Dialysis?**

A circumferential disinsertion of the peripheral retina from the ora serrata.

- **Horseshoe tear**
- **Operculated hole**
- **Atrophic hole**
- **Lattice**
What is a retinal dialysis?
A circumferential disinsertion of the peripheral retina from the ora serrata

What is the inciting event?

Horseshoe tear

Operculated hole

Atrophic hole

Lattice
What is a retinal Dialysis?
A circumferential disinsertion of the peripheral retina from the ora serrata

What is the inciting event?
Usually blunt trauma

Horseshoe tear
Operculated hole
Atrophic hole
Lattice
What is a retinal dialysis?
A circumferential disinsertion of the peripheral retina from the ora serrata

What is the inciting event?
Usually blunt trauma

In general terms, what is the process by which dialysis occurs and proceeds?

Horseshoe tear
Operculated hole
Atrophic hole
Lattice
What is a retinal dialysis?
A circumferential disinsertion of the peripheral retina from the ora serrata

What is the inciting event?
Usually blunt trauma

In general terms, what is the process by which dialysis occurs and proceeds?
Compression of the globe produces vitreous-based mechanical stress that gets focused at the ora region. This stress causes several clock-hours of neurosensory retina to ‘let go’ at the ora.
What is a retinal dialysis?
A circumferential disinsertion of the peripheral retina from the ora serrata

What is the inciting event?
Usually blunt trauma

In general terms, what is the process by which dialysis occurs and proceeds?
Compression of the globe produces vitreous-based mechanical stress that gets focused at the ora region. This stress causes several clock-hours of neurosensory retina to ‘let go’ at the ora. After disinserting, the vitreous-based mechanical stress ‘peels’ the NS retina posteriorly, separating it from the underlying RPE
Retinal Lesions: Not Matching

Retinal dialysis
Retinal Lesions: Not Matching

Dialysis

What is a Horseshoe tear?

Operculated hole

Atrophic hole

Lattice
Dialysis

What is a **Horseshoe tear**?

*What is a horseshoe tear?*

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina

Operculated hole

Atrophic hole

Lattice

Retinal Lesions: Not Matching

‘The flap’

(The black part is the tear itself)
Horseshoe tear
What is a **Horseshoe tear**?

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

Where are they typically found?

Dialysis

Operculated hole

Atrophic hole

Lattice
What is a horseshoe tear?
Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina

Where are they typically found?
In the far periphery, near the ora serrata
Retinal Lesions: Not Matching

What is a horseshoe tear?
Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina

Where are they typically found?
In the far periphery, near the ora serrata

How do they develop?
What is a Horseshoe tear?
Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina

Where are they typically found?
In the far periphery, near the ora serrata

How do they develop?
A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina.
**What is a Horseshoe tear?**

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

**Where are they typically found?**

In the far periphery, near the ora serrata.

**How do they develop?**

A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina. Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.
Horseshoe tear mechanism
What is a Horseshoe tear?
Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

Where are they typically found?
In the far periphery, near the ora serrata.

How do they develop?
A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina. Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.
Dialysis

**What is a Horseshoe tear?**

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

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In the far periphery, near the ora serrata.

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A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina. Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.

Retinal Lesions: Not Matching

- **‘The flap’**
  - Anterior
  - Posterior

  (The black part is the tear itself)
What is a Horseshoe tear?

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

Where are they typically found?

In the far periphery, near the ora serrata.

How do they develop?

A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina. Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.

‘Vitreous tension tearing the retina and peeling it back’ sounds an awful lot like the description of retinal dialysis we saw a few slides ago. Are these fundamentally the same lesion?

Not at all—in fact, in an important sense they are the opposite of one another. In a retinal dialysis, the disinserted retina peels posteriorly, away from the vitreous base. In contrast, in a horseshoe tear the retina peels anteriorly, towards the vitreous base.
What is a **Horseshoe tear**? 

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

Where are they typically found?

In the far periphery, near the ora serrata.

How do they develop?

A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina.

Tension on the vitreous **tears the retina and peels it back** producing the flap.

‘Vitreous tension tearing the retina and peeling it back’ sounds an awful lot like the description of retinal dialysis we saw a few slides ago. Are these fundamentally the same lesion?

Not at all—in fact, in an important sense they are the **opposite** of one another. In a retinal dialysis, the disinserted retina peels posteriorly, away from the vitreous base.
**What is a Horseshoe tear?**

Just what it sounds like—a horseshoe-shaped defect torn in the neurosensory retina.

*Where are they typically found?*

In the far periphery, near the ora serrata.

*How do they develop?*

A tongue of attached vitreous extends beyond the normal limit of the vitreous base, onto the peripheral retina. Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.

*‘The flap’*

(The black part is the tear itself)

*‘Vitreous tension tearing the retina and peeling it back’ sounds an awful lot like the description of retinal dialysis we saw a few slides ago. Are these fundamentally the same lesion?*

Not at all—in fact, in an important sense they are the opposite of one another. In a retinal dialysis, the disinserted retina peels posteriorly, away from the vitreous base. In contrast, in a horseshoe tear the retina peels anteriorly, towards the vitreous base.

**Retinal Lesions: Not Matching**

Dialysis

Operculated

Atrophic

Lattice
Retinal dialysis: Retina peels *away* from vitreous base

Horseshoe tear: Retina peels *toward* vitreous base
Dialysis

Horseshoe tear

What is an Operculated hole?

Atrophic hole

Lattice
Dialysis

Horseshoe tear

What is an Operculated hole?

Atrophic hole

Lattice
What is an **Operculated hole**?

*What does operculated mean?*
It means, ‘covered by an operculum’

*OK, so what’s an operculum?*
Dialysis

Horseshoe tear

What is an Operculated hole?

Atrophic hole

Lattice

Retinal Lesions: Not Matching

What does operculated mean?
It means, ‘covered by an operculum’

OK, so what’s an operculum?
An operculum is a lid, or a cover. Thus, an operculated hole is a full-thickness break in the retina with the missing piece of retina suspended within the vitreous above the break.
Operculated retinal tear/hole: Mechanism

Operculated retinal tear/hole (far right of the pic) with the operculum floating in the vitreous
**Dialysis**

**Horseshoe tear**

**What is an Operculated hole?**

**Atrophic hole**

**Lattice**

---

**Retinal Lesions: Not Matching**

*What does operculated mean?*

It means, ‘covered by an operculum’

*OK, so what’s an operculum?*

An operculum is a lid, or a cover. Thus, an operculated hole is a full-thickness break in the retina with the missing piece of retina suspended within the vitreous above the break.

*How do operculated holes come about?*
What is an operculated hole?

An operculated hole is a full-thickness break in the retina with the missing piece of retina suspended within the vitreous above the break.

What does operculated mean?

It means, ‘covered by an operculum’

OK, so what’s an operculum?

An operculum is a lid, or a cover. Thus, an operculated hole is a full-thickness break in the retina with the missing piece of retina suspended within the vitreous above the break.

How do operculated holes come about?

They often (but not always) start as horseshoe tears, with subsequent amputation of the flap; ie, the operculum is the amputated flap (see above)
What is an Atrophic hole?

The Retina book say surprisingly little about atrophic holes, and what little is said is somewhat contradictory. One mention states atrophic holes have “not been linked to an increased risk of retinal detachment.”
The *Retina* book say surprisingly little about atrophic holes, and what little is said is somewhat contradictory. One mention states atrophic holes have “not been linked to an increased risk of retinal detachment.” But another mention asserts that atrophic holes within an area of lattice degeneration are an ‘uncommon cause of retinal detachment.’ Caveat emptor.
Atrophic retinal hole
Figure 16-6  Lattice degeneration with atrophic hole. A, Fundus photograph of lattice degeneration with a small atrophic hole as viewed with scleral depression. B, Fundus photograph of an example of an atrophic hole as may be observed in lattice degeneration without scleral depression. (Part A courtesy of Norman E. Byer, MD.)
Dialysis

Horseshoe tear

Operculated hole

Atrophic hole

(We already know about Lattice)
With respect to retinal breaks, what does it mean to say a pt is ‘symptomatic’?

Symptomatic

Dialysis

Horseshoe tear

Operculated hole

Atrophic hole

Lattice
With respect to retinal breaks, what does it mean to say a pt is ‘symptomatic’?
It means the patient is c/o photopsias and/or floaters

Symptomatic

Dialysis

Horseshoe tear

Operculated hole

Atrophic hole

Lattice
For each retinal break, state whether it should be treated *prophylactically*

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**Under what circumstances should you consider treating asymptomatic horseshoe tears?**
For each retinal break, state whether it should be treated **prophylactically**

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**Under what circumstances should you consider treating asymptomatic horseshoe tears?**

--If they are associated with **two words**
For each retinal break, state whether it should be treated prophylactically.

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**Under what circumstances should you consider treating asymptomatic horseshoe tears?**

--If they are associated with lattice degeneration.
For each retinal break, state whether it should be treated **prophylactically**

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Under what circumstances should you consider treating asymptomatic horseshoe tears?
--If they are associated with lattice degeneration
--If the eye is significantly myopic
For each retinal break, state whether it should be treated *prophylactically*

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*Under what circumstances should you consider treating asymptomatic horseshoe tears?*

- If they are associated with lattice degeneration
- If the eye is significantly myopic
For each retinal break, state whether it should be treated **prophylactically**

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**Under what circumstances should you consider treating asymptomatic horseshoe tears?**
- If they are associated with lattice degeneration
- If the eye is significantly myopic
- If the eye is [ ] or [ ]
For each retinal break, state whether it should be treated *prophylactically*

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*Under what circumstances should you consider treating asymptomatic horseshoe tears?*

- If they are associated with lattice degeneration
- If the eye is significantly myopic
- If the eye is aphakic or pseudophakic
- …
### Symptomatic vs. Asymptomatic Treatment

**Dialysis**
- Yes
- ‘Consider it’

**Horseshoe tear**
- Yes
- No, unless...

**Operculated hole**
- Maybe
- Rarely

**Atrophic hole**
- Rarely
- Rarely

**Lattice**
- Rarely
- No (unless hx RD in fellow eye)

---

**Under what circumstances should you consider treating asymptomatic horseshoe tears?**

- If they are associated with lattice degeneration
- If the eye is significantly myopic
- If the eye is aphakic or pseudophakic
- If there was a hx of in the fellow eye

---

**For each retinal break, state whether it should be treated prophylactically**

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For each retinal break, state whether it should be treated **prophylactically**

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**Under what circumstances should you consider treating asymptomatic horseshoe tears?**

- If they are associated with lattice degeneration
- If the eye is significantly myopic
- If the eye is aphakic or pseudophakic
- If there was a hx of retinal detachment in the fellow eye
For each retinal break, state whether it should be treated *prophylactically*

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Under what circumstances should you consider treating symptomatic operculated holes?
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Under what circumstances should you consider treating symptomatic operculated holes?

--If there is three words at the edge of the hole

--
For each retinal break, state whether it should be treated **prophylactically**

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Under what circumstances should you consider treating symptomatic operculated holes?

--If there is ongoing vitreous traction at the edge of the hole
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For each retinal break, state whether it should be treated *prophylactically*. 

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Under what circumstances should you consider treating symptomatic operculated holes?

--If there is ongoing vitreous traction at the edge of the hole
--If the hole is...
For each retinal break, state whether it should be treated **prophylactically**

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**Under what circumstances should you consider treating symptomatic operculated holes?**
--If there is ongoing vitreous traction at the edge of the hole
--If the hole is large
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For each retinal break, state whether it should be treated **prophylactically**

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Under what circumstances should you consider treating symptomatic operculated holes?
--If there is ongoing vitreous traction at the edge of the hole
--If the hole is large
--If [two words] is present
For each retinal break, state whether it should be treated **prophylactically**

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Under what circumstances should you consider treating symptomatic operculated holes?
--If there is ongoing vitreous traction at the edge of the hole
--If the hole is large
--If vitreous hemorrhage is present
For each retinal break, state whether it should be treated *prophylactically*.

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(Lattice itself can’t be symptomatic—only a lesion associated with it can)
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*Under what circumstances should you consider treating lattice?*
For each retinal break, state whether it should be treated **prophylactically**

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**Under what circumstances should you consider treating lattice?**

--If two words are present
### For each retinal break, state whether it should be treated prophylactically

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**Under what circumstances should you consider treating lattice?**

---If horseshoe tears are present
---If the eye is [ ] or [ ]
For each retinal break, state whether it should be treated **prophylactically**

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**Q/A**

*For each retinal break, state whether it should be treated *prophylactically*.*

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**Under what circumstances should you consider treating lattice?**

--If horseshoe tears are present
--If the eye is aphakic or pseudophakic
--If there was a hx of [two words] in the fellow eye
For each retinal break, state whether it should be treated prophylactically.

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Under what circumstances should you consider treating lattice?

- If horseshoe tears are present
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- If there was a history of retinal detachment in the fellow eye
For each retinal break, state whether it should be treated **prophylactically**

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**In general, which carries the highest risk of RD?**

**Horseshoe tears**

**Why?**
For each retinal break, state whether it should be treated **prophylactically**.

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**In general, which carries the highest risk of RD?**
Horseshoe tears

**Why?**
Because of **ongoing vitreous traction**
% of eyes harbor a retinal break, but only 1 in big number get an RD
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a prophylaxis goal (2 words) around the break
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD.

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break.
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: **Creation of a chorioretinal scar** around the break

How does one go about creating the chorioretinal scar?
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: **Creation of a chorioretinal scar** around the break

*How does one go about creating the chorioretinal scar?* By inducing an inflammatory response in the chorioretinal tissue immediately surrounding the break.
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

How does one go about creating the chorioretinal scar? By inducing an inflammatory response in the chorioretinal tissue immediately surrounding the break

What are the two main surgical approaches for inducing the inflammatory response?
--
--
● 6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

● Goal of RD prophylaxis: **Creation of a chorioretinal scar** around the break

---

*How does one go about creating the chorioretinal scar?*
By inducing an inflammatory response in the chorioretinal tissue immediately surrounding the break

*What are the two main surgical approaches for inducing the inflammatory response?*
--Laser
--Transscleral cryotherapy
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

If a flap or horseshoe tear is being prophylaxed, be sure to treat a larger area, especially anterior vs posterior to the lesion (can pull through a chorioretinal scar)
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

If a flap or horseshoe tear is being prophylaxed, be sure to treat a larger area, especially anterior to the lesion (continuing traction can pull through a chorioretinal scar)
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

If a flap or horseshoe tear is being prophylaxed, be sure to treat a larger area, especially anterior to the lesion (continuing traction can pull through a chorioretinal scar)

How far anterior should treatment extend?
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

If a flap or horseshoe tear is being prophylaxed, be sure to treat a larger area, especially anterior to the lesion (continuing traction can pull through a chorioretinal scar)

How far anterior should treatment extend?
As a general rule, all the way to the ora serrata
6% of eyes harbor a retinal break, but only 1 in 12,000 get an RD

Goal of RD prophylaxis: Creation of a chorioretinal scar around the break

If a flap or horseshoe tear is being prophylaxed, be sure to treat a larger area, especially anterior to the lesion (continuing traction can pull through a chorioretinal scar)

How far anterior should treatment extend? As a general rule, all the way to the ora serrata