(But don't start yet)



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



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



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



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





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Manialiana Lifalala

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Rhegmatogenous





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RPE hypertrophy

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





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Vitreoretinal tufts Meridional folds

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RPE hypertrophy
Peripheral cystoid degeneration



Lattice (As b

(As before, let's start at the top and work down the list)

Cobblestone degeneration

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

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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

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17

How common is lattice degeneration?

Lattice -

Cobblesto

Vitreoretinal tufts

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Peripheral cystoid degeneration

--Black and flat

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18

How common is lattice degeneration?

Quite--it is found in 5-10% of the population

Lattice -

Cobblesto

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to tractional tear at of lesion

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

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Peripheral cystoid degeneration

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19

Lattice -

How common is lattice degeneration?

Quite--it is found in 5-10% of the population

When present, how likely is lattice to be bilateral?

nts RD extension

to tractional tear at of lesion

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Vitreoretinal tufts

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20

Lattice -

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

ents RD extension

to tractional tear at of lesion

Cobblestor

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

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

--Present in 100% of adults >20

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina



21

Lattice -

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

ents RD extension

to tractional tear at of lesion

Cobblesto

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

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--Present in 100% of adults >20

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--Islands of pars plana epithelium surrounded by retina

22

How common is lattice degeneration?

Quite--it is found in 5-10% of the population

Is it more common in myopic, or hyperopic eyes?

ents RD extension

to tractional tear at of lesion

Lattice -

Cobblesto

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

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23

How common is lattice degeneration?

Quite--it is found in 5-10% of the population

Lattice -

Is it more common in myopic, or hyperopic eyes?

Myopic

Cobblesto

ents RD extension

to tractional tear at of lesion

Vitreoretinal tufts

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RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

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

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--Islands of pars plana epithelium surrounded by retina



24

Lattice -

How common is lattice degeneration?

Quite--it is found in 5-10% of the population

Is it more common in myopic, or hyperopic eyes? Myopic

Cobblestor Is it sporadic, or familial?

ents RD extension

to tractional tear at of lesion

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Black and flat

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--Islands of pars plana epithelium surrounded by retina



25

Quite--it is found in 5-10% of the population

How common is lattice degeneration?

Lattice -

Is it more common in myopic, or hyperopic eyes? **Myopic**

Cobblesto Is it sporadic, or familial? While not inevitable, a familial predisposition is often found ents RD extension

to tractional tear at of lesion

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Black and flat

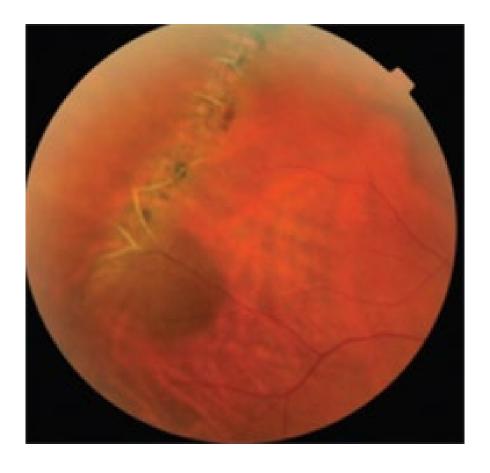
--Small peripheral retinal elevations 2° to vitreous or zonular traction

--Present in 100% of adults >20

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina





Lattice degeneration: Note the retinal thinning, which is characterized by a color change. There are also pigment clumps and crosshatching of sclerotic vessels



Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

There are three clinically important aspects to the structure of lattice degeneration--what are they?

- 1)
- 2)
- 3

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

- --Spiculated appearance
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Lattice -

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1) A focal area of retina for which the three words is missing;

3)

Enclosed ora bays

RPE hypertrophy

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Lattice -

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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) 3)

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Spiculated appearance

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Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

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 two words overlying this retinal lesion

3)

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina



Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

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

3)

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina



Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

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 one word between the edges of the retina lesion and the walls of the overlying pocket of liquefied vitreous

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Spiculated appearance

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- 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

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

--Spiculated appearance

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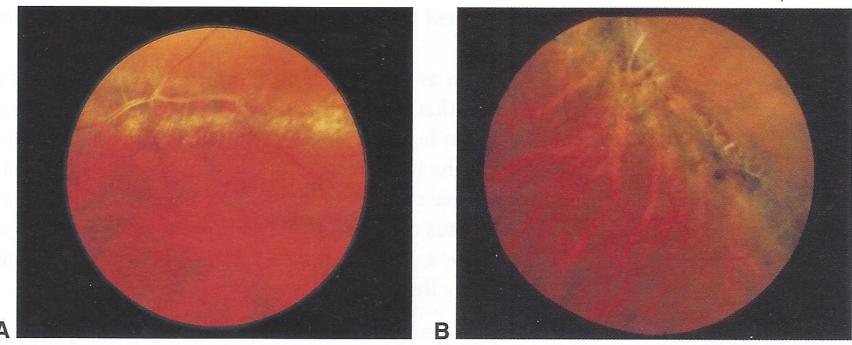


Figure 16-3 Lattice degeneration. **A,** Color fundus photograph of lattice degeneration as viewed without scleral indentation. Vascular sheathing is apparent where the vessel crosses the area of lattice. Characteristic white lattice lines are visible. **B,** Color fundus photograph of another example 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.*)



Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

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) <u>abnormally firm</u> **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.

Enclosed ora bays

--Spiculated appearance

RPE hypertrophy

--Islands of pars plana epithelium surrounded by retina

Peripheral cystoid degeneration



Retinal tear at the posterior edge of lattice degeneration





Lattice -

Cobblestone degeneration

Vitreoretinal tufts

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

- --Actually prevents RD extension
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Lattice .

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--Spiculated appearance

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Peripheral cystoid degeneration

*Note: The assertion that cobblestones prevent RD extension is in a previous version of the *Retina* book. It is not found in the most recent version I checked; that said, my impression is it was culled to save space, not because it's no longer true. Still, caveat emptor.



Cobblestone degeneration

--Actually prevents RD extension

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

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

evations action

>20 y.o.

IXI E Hypertrophy

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina



Lattice -

--Actually prevents RD extension

Cobblestone degeneration

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

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 pavingstones). They are found anterior to the equator, often close to the ora serrata.

evations action

>20 y.o.

IXI E HYPCHIOPHY

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina





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.)



Lattice -

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

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What is the ora serrata?

evations action

>20 y.o.

га с пурстаорну

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina





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What is the ora serrata?

The junction between the peripheral retina and the two words of the ciliary body

evations action

>20 y.o.

гл – пурстаорпу

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The junction between the peripheral retina and the pars plana of the ciliary body

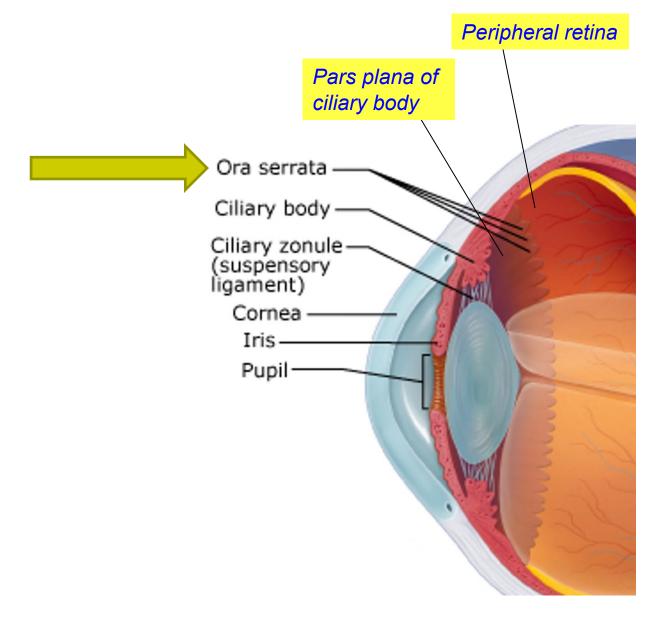
evations action

>20 y.o.

га с пурстаорну

Peripheral cystoid degeneration

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Ora serrata





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What is the histological essence of cobblestones?

evations action

>20 y.o.

гл – пурстаорпу

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina



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What is the histological essence of cobblestones?

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

evations action

>20 y.o.

га шурстаорпу

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina



Lattice -

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How do they prevent extension of an RD?

evations action

>20 y.o.

га с пурстаорну

Peripheral cystoid degeneration

--Islands of pars plana epithelium surrounded by retina



Lattice -

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What is the histological essence of cobblestones?

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 Bruchs, they do not allow liquid vitreous to proceed through their location

IXI E HYPCHIOPHY

--Islands of pars plana epithelium surrounded by retina

Peripheral cystoid degeneration

-- Redundant linear retinal elevations

evations action

>20 y.o.



Lattice -

Cobblestone degeneration

Vitreoretinal tufts

?

Meridional folds

RPE hyperplasia

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

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Lattice -

Cobblestone degeneration

Vitreoretinal tufts

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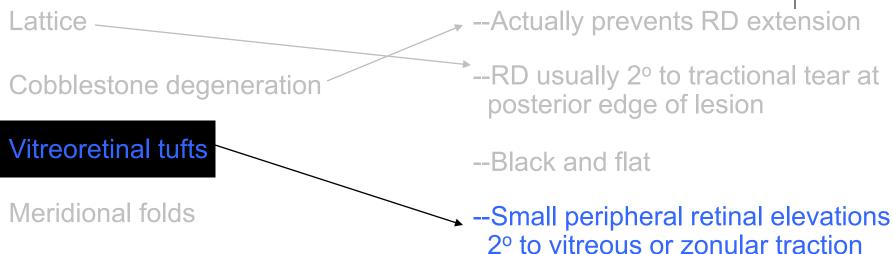
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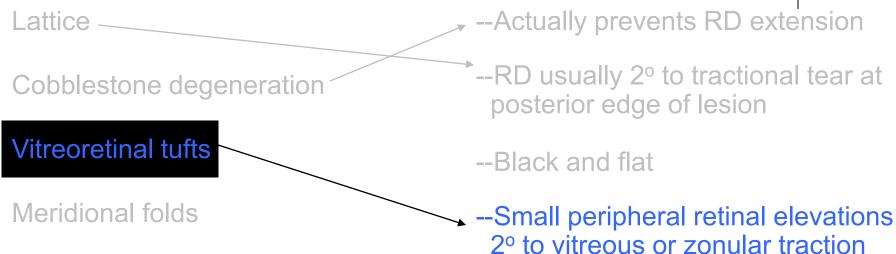




PPE hypornlacia

Vitreoretinal tufts are known also by what name?





Vitreoretinal tufts are known also by what name? Peripheral retinal tufts

PPF hypornlacia





--Actually prevents RD extension

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

Vitreoretinal tufts

--Black and flat

Meridional folds

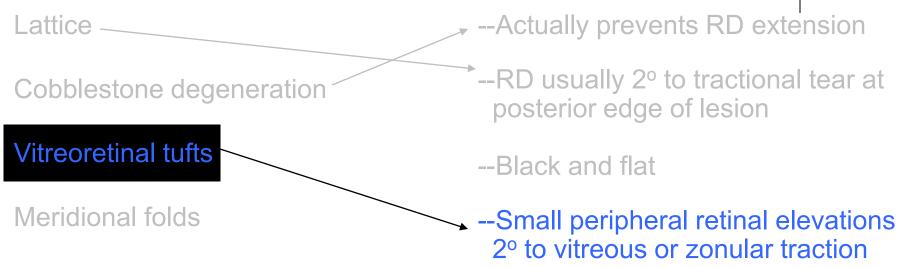
--Small peripheral retinal elevations
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PPF hyporplacia

Vitreoretinal tufts are known also by what name?
Peripheral retinal tufts

What are vitreoretinal tufts composed of?





PPF hyporplacia

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.



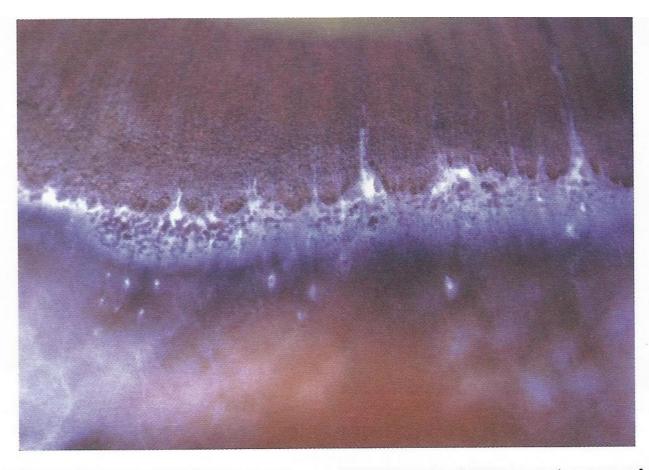
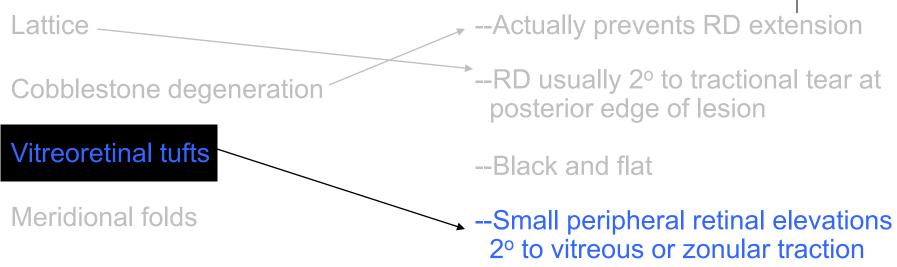


Figure 16-7 Color photograph of a gross eye specimen shows a cluster of white surface nodules with characteristic gross appearance and location of noncystic retinal tufts. (Used with permission from Foos RY, Silverstein RN, eds. System of Ocular Pathology. Vol. 3. Los Angeles: iPATH Press; 2004.)





Vitreoretinal tufts are known also by what name? Peripheral retinal tufts

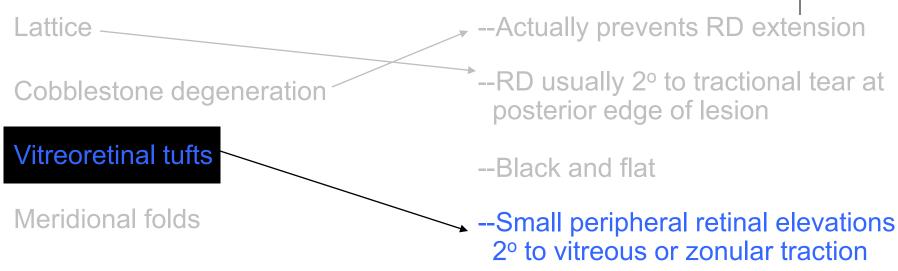
What are vitreoretinal tufts composed of?

DDE hyporplacia

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?





PPE hypornlacia

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.





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
 2º 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

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Lattice —

Cobblestone degeneration

Vitreoretinal tufts

Meridional folds

How are meridional folds oriented?

--Actually prevents RD extension

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 2º 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.

r ompriorar oyotola aogonioration





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?

r oripriorar oyotota aogorioration





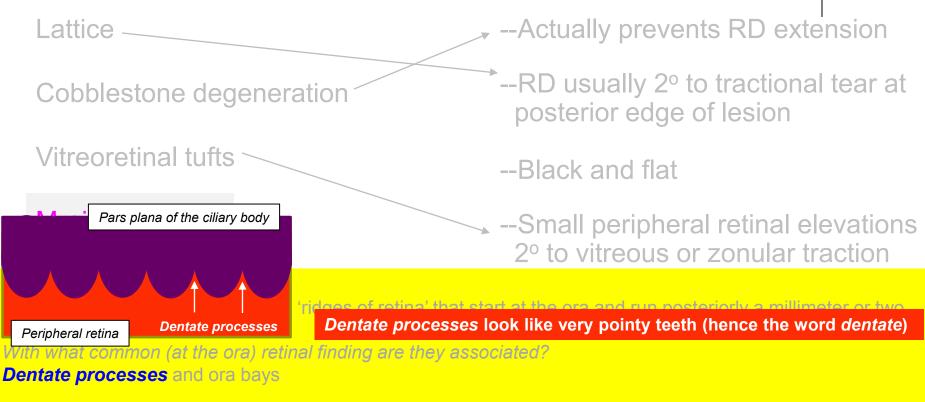
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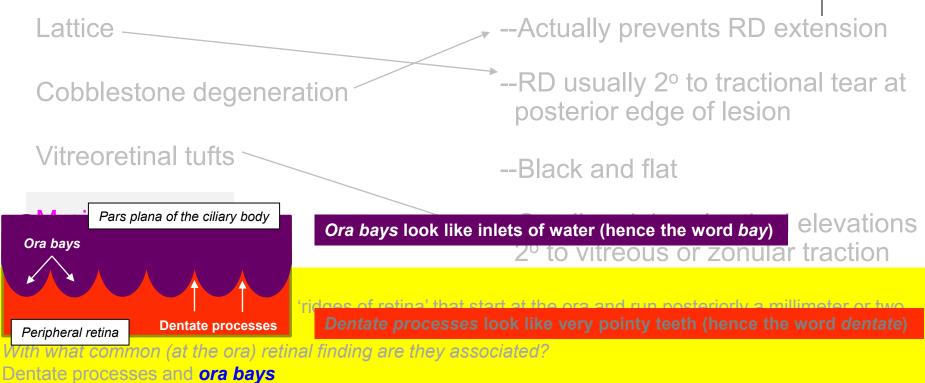
With what common (at the ora) retinal findings are they associated? Dentate processes and ora bays

r ompriorar oyotola aogonioration

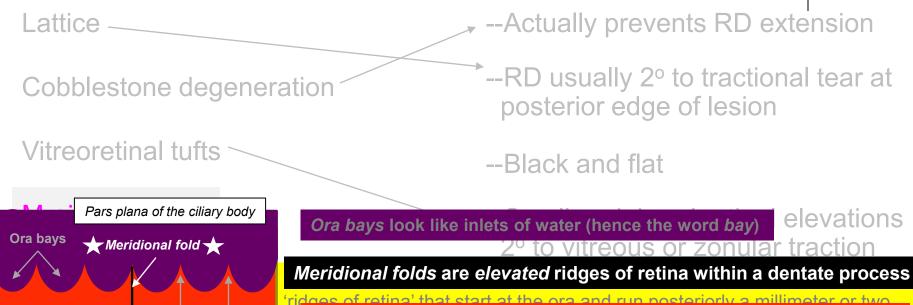










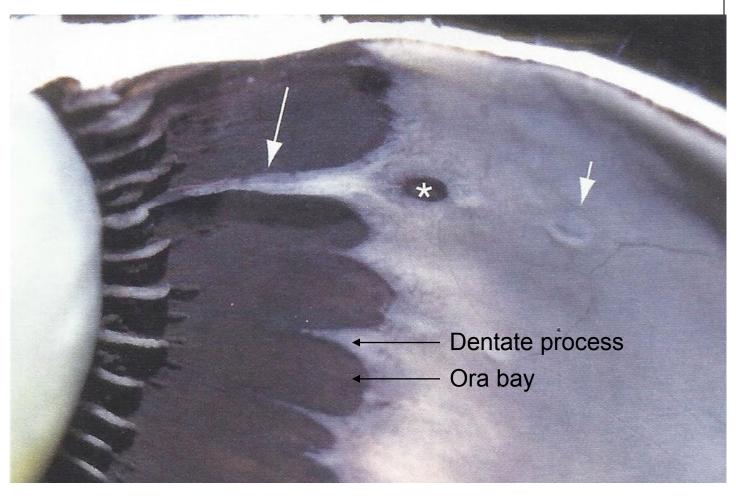


With what common (at the ora) retinal finding are they associated? Dentate processes and ora bays

Dentate processes

Peripheral retina





Meridional fold (*large white arrow*)





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?

r oriphoral oyotola aogonoration







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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 a horseshoe tear

anterior VS posterior

end of the fold can lead to

T OTIPITOTAL OYOLOIA AOGOTIOTALIOTI





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.

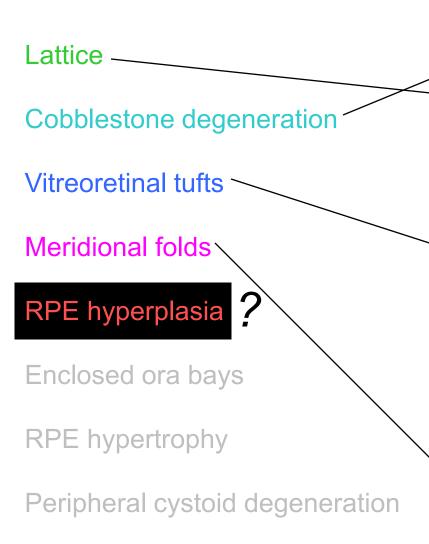
With what common (at the ora) retinal findings are they associated? Dentate processes and ora bays

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

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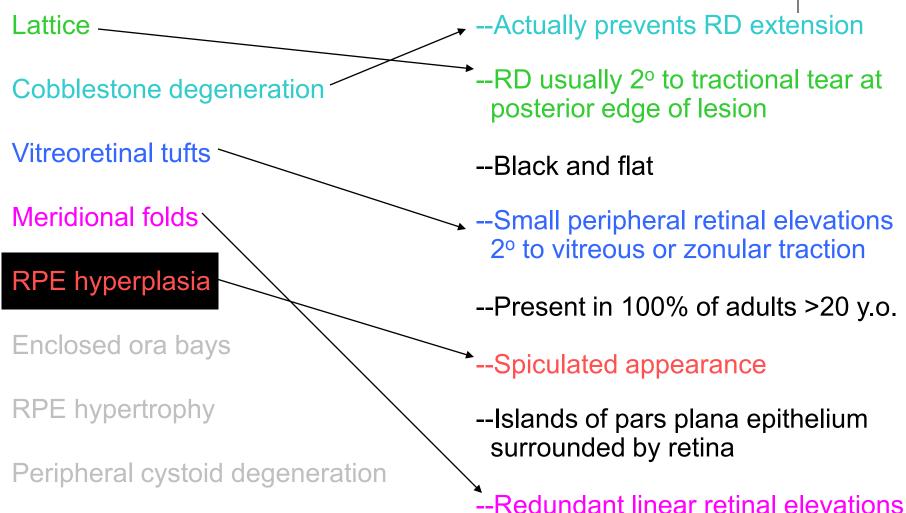




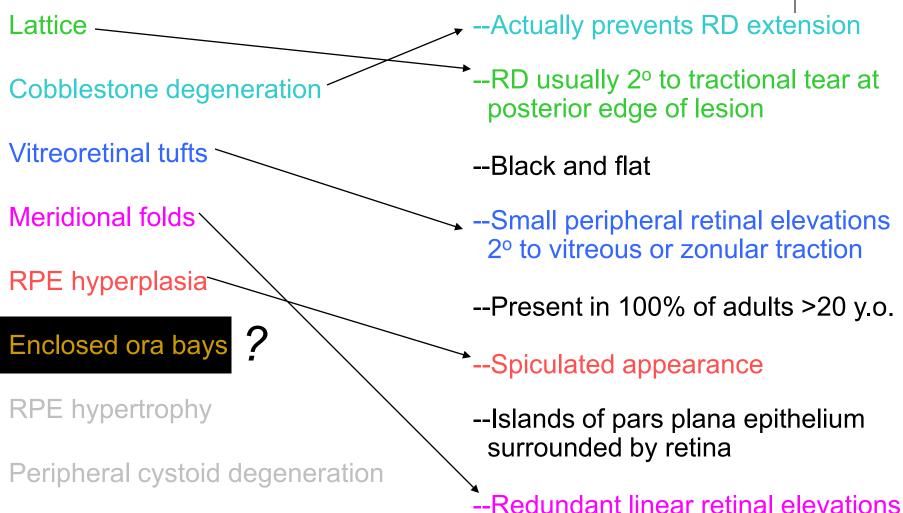
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 - --Redundant linear retinal elevations

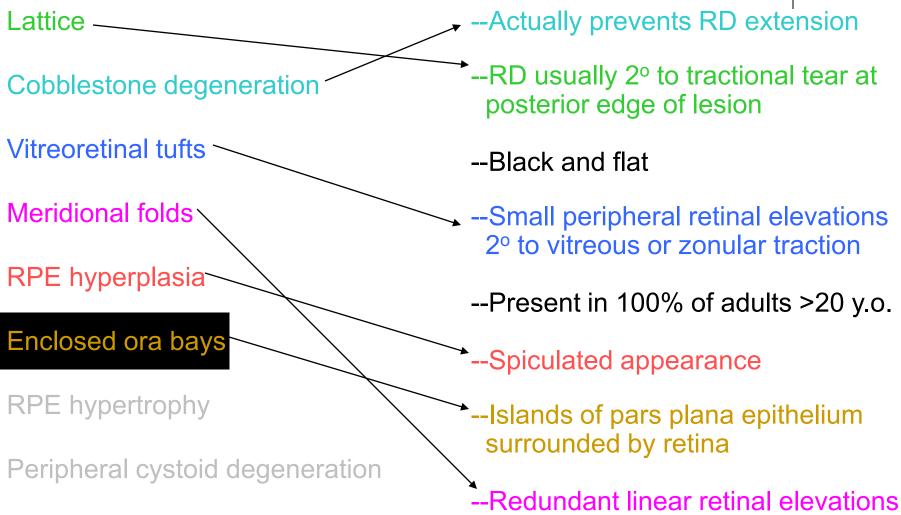




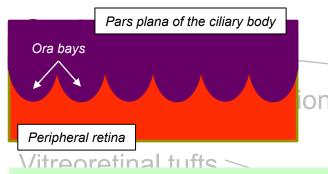












--Actually prevents RD extension

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

How does an enclosed ora bay differ from the sort we encountered previously?

itions on

Enclosed ora bays

RPE hypertrophy

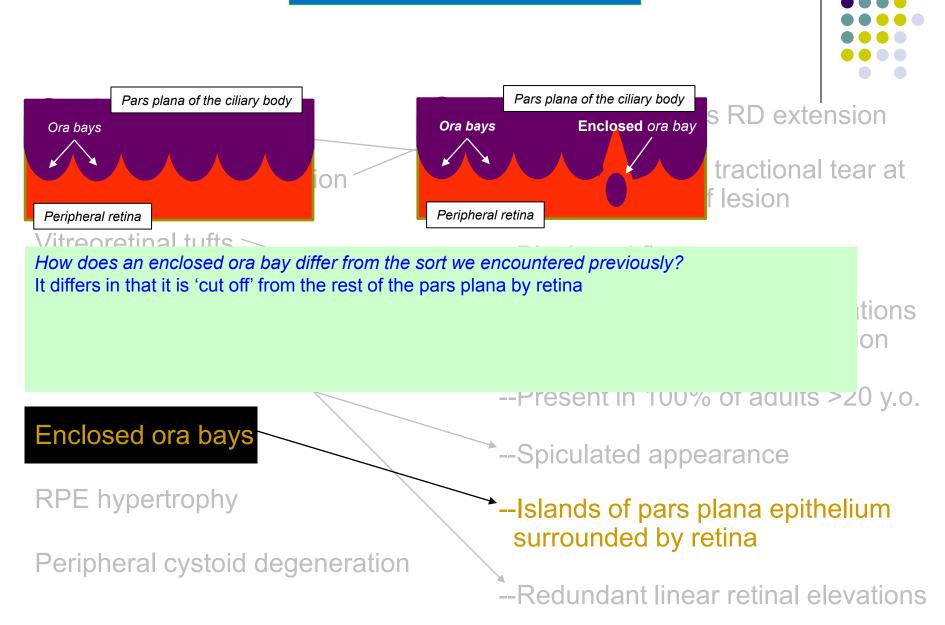
Peripheral cystoid degeneration

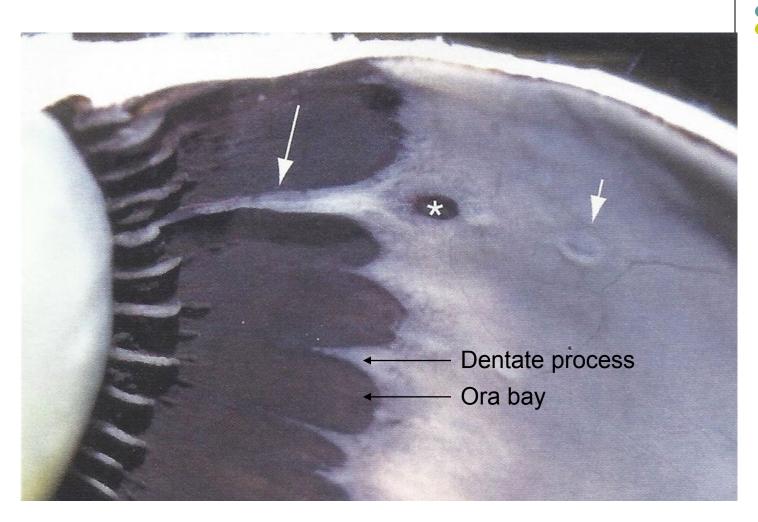
-- Present in 100% of adults >20 y.o.

--Spiculated appearance

*--Islands of pars plana epithelium surrounded by retina

78





Enclosed ora bay (asterisk)





Lattice ______
Cobblestone degeneration

--Actually prevents RD extension

--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?

itions on

Enclosed ora bays

RPE hypertrophy

Peripheral cystoid degeneration

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

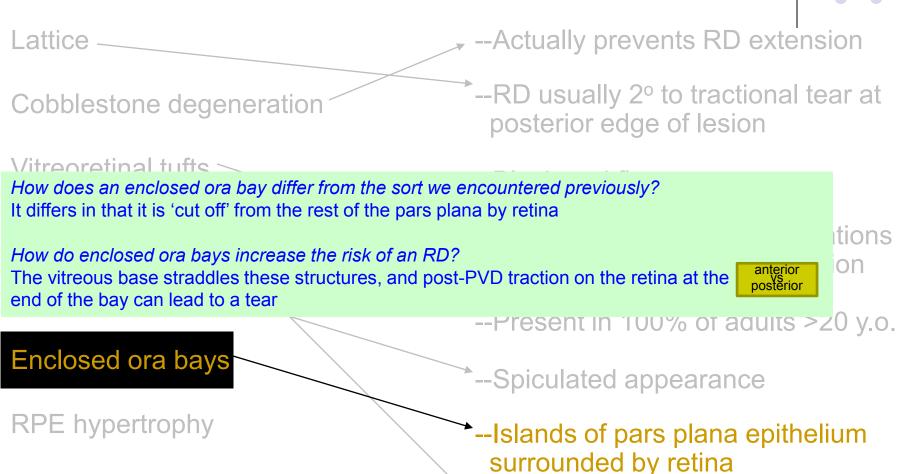
--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina

Peripheral cystoid degeneration

Retinal Lesions: Matching







tions

on

Vitreoretinal tufte \

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

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

Enclosed ora bays

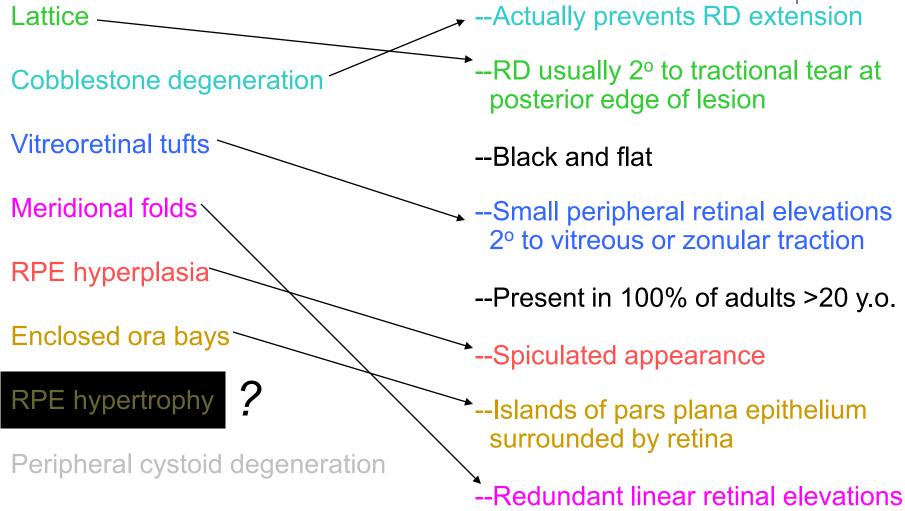
RPE hypertrophy

Peripheral cystoid degeneration

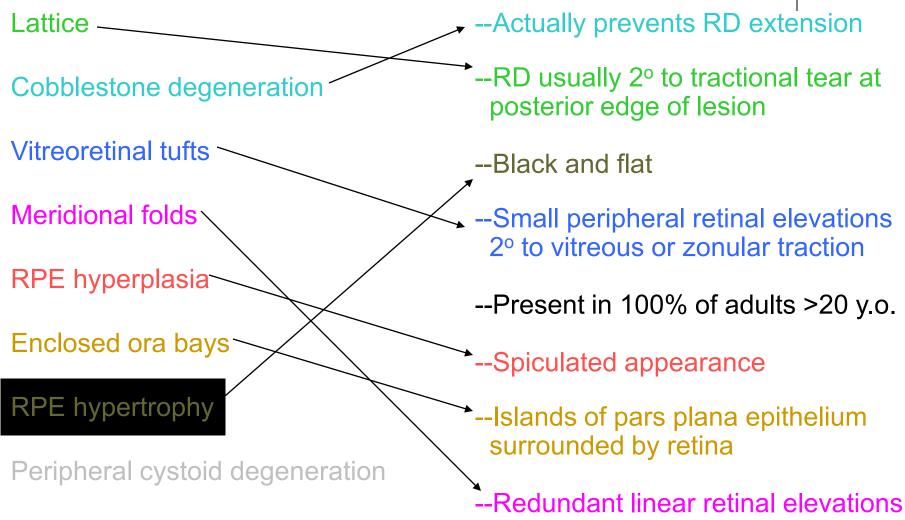
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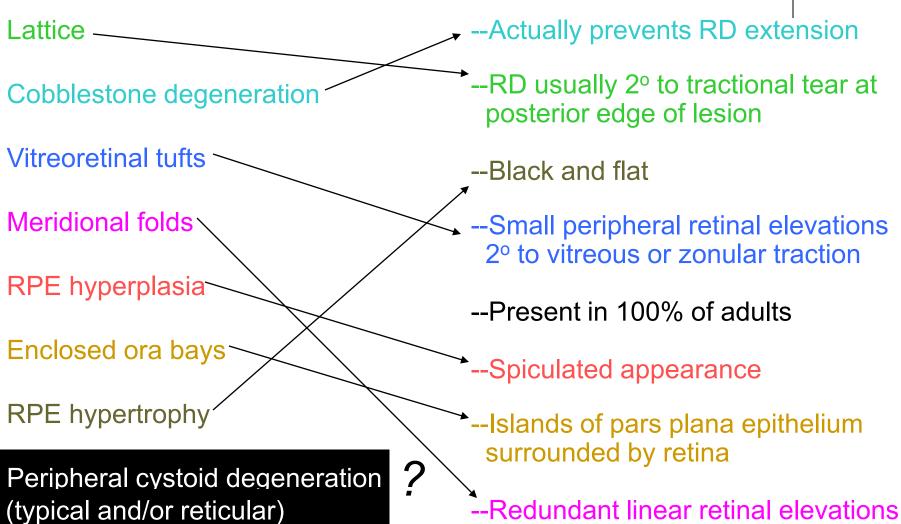




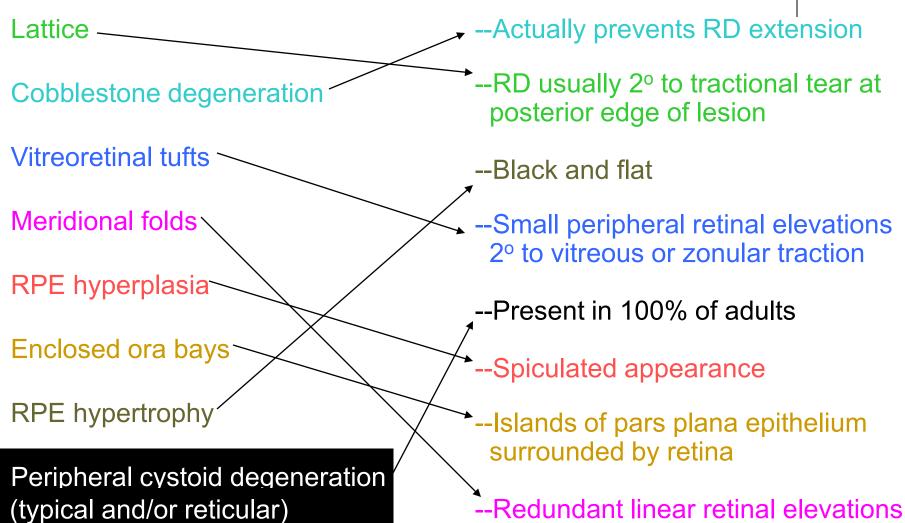














Lattice -

Which form is present in "100% of adults"?

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Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

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Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

--Actually prevents RD extension

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Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

--Actually prevents RD extension

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

--Black and flat

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

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Lattice -

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In which retinal layer are the cystoid cavities found in typical cystoid degeneration?
The outer plexiform

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Lattice -

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What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

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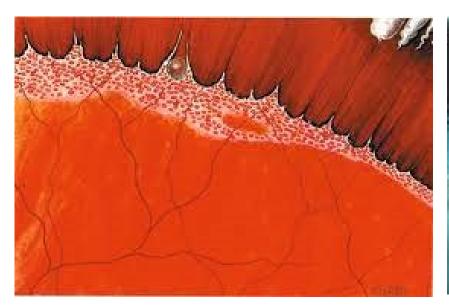
--Present in 100% of adults

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Typical peripheral cystoid degeneration: 'Bubbly' appearance



Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

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Lattice -

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In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found? In the far periphery

Peripheral cystoid degeneration (typical and/or reticular)

--Actually prevents RD extension

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--Small peripheral retinal elevations2° to vitreous or zonular traction

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Lattice -

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The outer plexiform

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the and extends several millimeters posteriorly

Peripheral cystoid degeneration (typical and/or reticular)

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Peripheral cystoid degeneration (typical and/or reticular)

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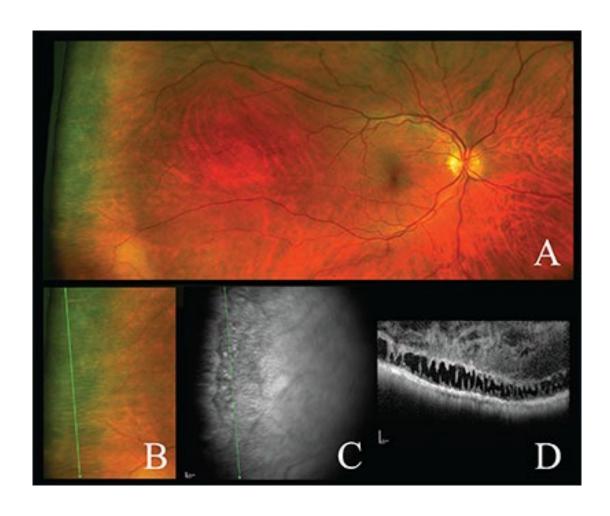
--Small peripheral retinal elevations 2° to vitreous or zonular traction

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--Spiculated appearance

`--Islands of pars plana epithelium surrounded by retina





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



Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

At what **specific** location (as in circumferential locale) is typical cystoid degeneration located?

Bubbly

specific
At what general retinal location is typical cystoid degeneration found?

Peripheral cystoid degeneration (typical and/or reticular)

--Actually prevents RD extension

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

--Black and flat

mall peripheral retinal elevations to vitreous or zonular traction

--Present in 100% of adults

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina





Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

At what **specific** location (as in circumferential locale) is typical cystoid degeneration located?

The temporal periphery

Bubbly

specific

At what general retinal location is typical cystoid degeneration found?

Temporal

Peripheral cystoid degeneration (typical and/or reticular)

--Actually prevents RD extension

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mall peripheral retinal elevations to vitreous or zonular traction

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Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

At what specific location (as in circumferential locale) is typical cystoid degeneration located?

The temporal periphery, more often

than

inferior v superior

Bubbly

specific At what general retinal location is typical cystoid

degeneration found? Temporal (esp.

infero- vs superotemporal

Peripheral cystoid degeneration (typical and/or reticular)

--Actually prevents RD extension

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--Black and flat

mall peripheral retinal elevations ^p to vitreous or zonular traction

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Lattice -

Which form is present in "100% of adults"? 'Typical' (that's why it's called 'typical')

In which retinal layer are the cystoid cavities found in typical cystoid degeneration?

The outer plexiform

At what **specific** location (as in circumferential locale) is typical cystoid degeneration located?

The temporal periphery, more often inferior than superior)

Bubbly

specific

At what general retinal location is typical cystoid degeneration found?

Temporal (esp. inferotemporal)

Peripheral cystoid degeneration (typical and/or reticular)

--Actually prevents RD extension

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Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration?

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

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 - -- Redundant linear retinal elevations



Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

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Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

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Where is reticular cystoid degeneration located?

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

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Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

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

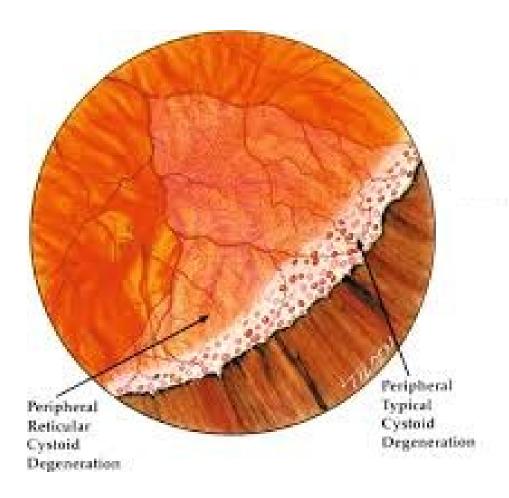
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At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

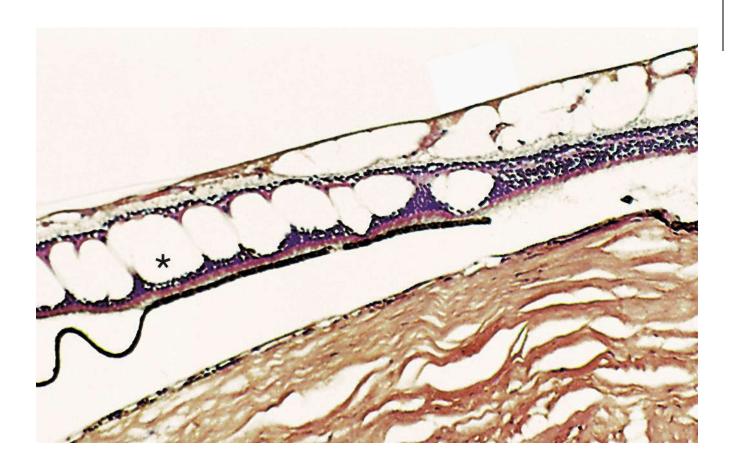
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Typical and reticular cystoid degeneration. Note their positional relationship





Typical peripheral cystoid degeneration consists of cystoid spaces in the outer plexiform layer (asterisk) on the lower left (anterior retina).





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



Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

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At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

Peripheral cystoid degeneration (typical and/or reticular)

`--Spiculated appearance

*--Islands of pars plana epithelium surrounded by retina



Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

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

What does this imply vis a vis reticular's circumferential locale? That like typical cystoid degeneration, it has a predilection for the inferotemporal periphery

At what general retinal location is typical cystoid degeneration found?

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In the first section of this slide-set we said that reticular peripheral cystoid degeneration predisposes an eye to RD—but this is somewhat misleading, because it skips a step.

114

No question yet—proceed when ready

Rougnly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration? It is found in ~20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

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

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

Peripheral cystoid degeneration (typical and/or reticular)

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surrounded by retina

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115

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to form an area of reticular degenerative The cysts have to process

Rougnly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration?

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

Peripheral cystoid degeneration (typical and/or reticular)

→ Reticular degenerative

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

116

--Black and flat

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

--Present in 100% of adults

--Spiculated appearance

--Islands of pars plana epithelium surrounded by retina

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Roughly speaking, what is the prevalence rate of reticular peripheral cystoid degeneration. Coalesce

It is found in ∼20% of adults

In which retinal layer are the cystoid cavities found? The nerve fiber layer (NFL)

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

What one word is used to describe the appearance of typical peripheral cystoid degeneration? 'Bubbly'

At what general retinal location is typical cystoid degeneration found?

In the far periphery—it starts at the ora and extends several millimeters posteriorly

Peripheral cystoid degeneration (typical and/or reticular)

Reticular degenerative retinoschisis

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

117

--Black and flat

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

--Present in 100% of adults

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118

at

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 2º to vitreous or zonular traction

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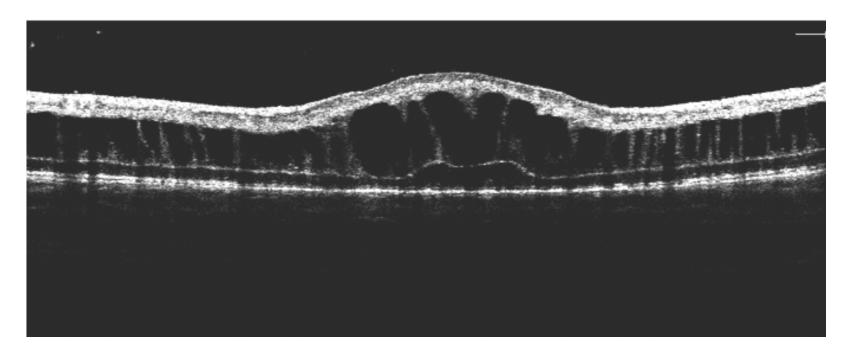
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Retinoschisis (Note: Not *degenerative cystoid* as being discussed here)

r at

Q

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Typical inferotemporal location for reticular degenerative retinoschisis

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Where is reticular cystola degenerated It is always adjacent and just posterio

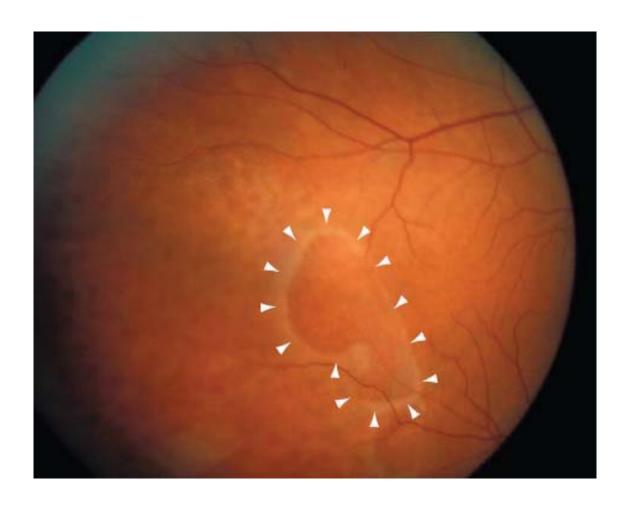
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Retinoschisis with large, irregular outer-schisis-layer holes *(outlined by arrowheads)* and yellow dots on the inner surface





What is a retinal dialysis?

What is a retinal **Dialysis**?

Horseshoe tear

Operculated hole

Atrophic hole

Lattice





What is a retinal **Dialysis**?

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A circumferential disinsertion of the peripheral retina from the ora serrata

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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.





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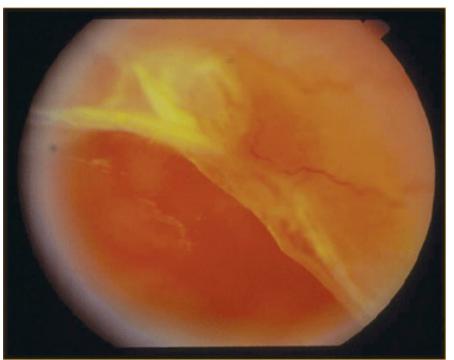
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Dialysis

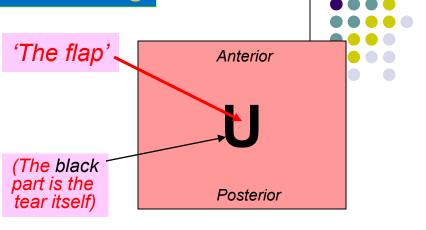
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151

Dialysis

What is a **Horseshoe tear**?

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

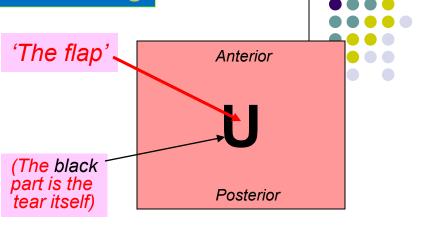
Operculated hole

Atrophic hole





Horseshoe tear



153

Dialysis

What is a **Horseshoe tear**?

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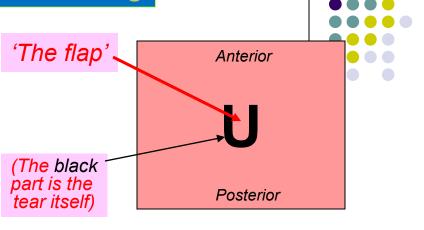
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Operculated hole

Where are they typically found?

Atrophic hole





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Dialysis

What is a **Horseshoe tear**?

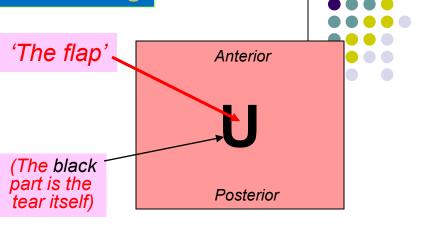
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Where are they typically found? In the far periphery, near the ora serrata

Atrophic hole



155

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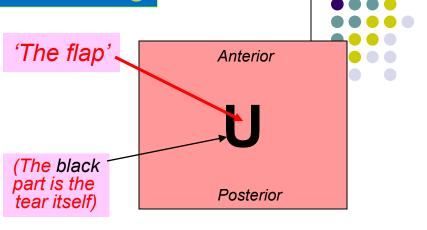
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How do they develop?





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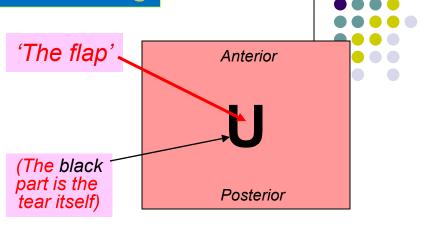
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How do they develop?

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





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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

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

Atrophic hole

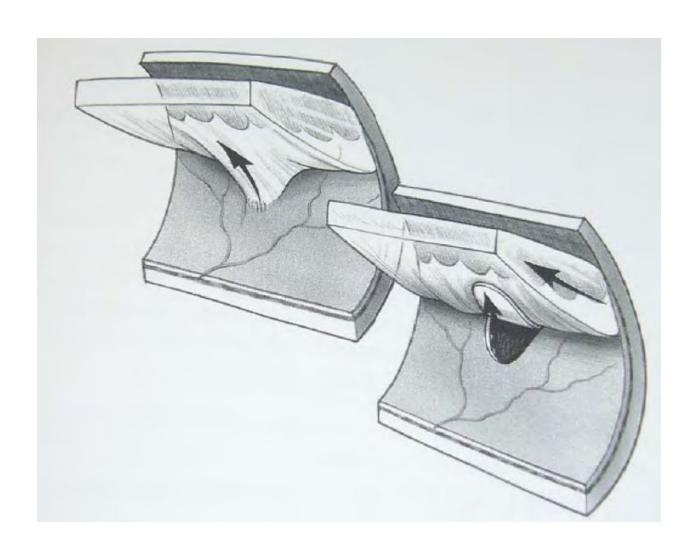
How do they develop?

Lattice

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.

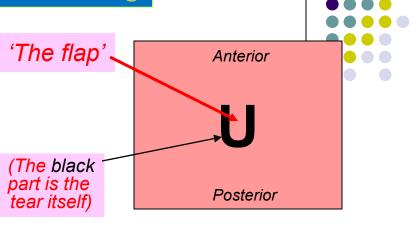




Horseshoe tear mechanism

Q

Retinal Lesions: Not Matching



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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

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

Atrophic hold

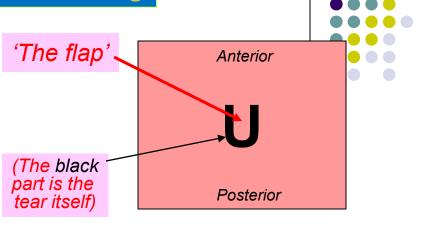
How do they develop?

What event most commonly precipitates this tension? s beyond the normal pripheral retina.

Lattice

Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.





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Dialysis

What is a **Horseshoe tear**?

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

Operculated hole

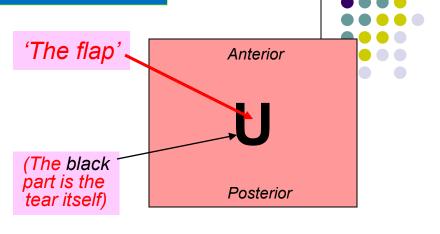
Where are they typically found? In the far periphery, near the ora serrata

Atrophic holo How do they develop?

What event most commonly precipitates this tension? s beyond the normal The occurrence of a **posterior vitreous detachment** pripheral retina.

Lattice

Tension on the vitreous gets focused at this site, and the tongue of vitreous tears the retina and peels it back, producing the flap.



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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

'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?

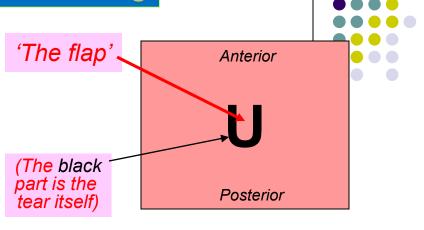
Atrophic

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 hap.





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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

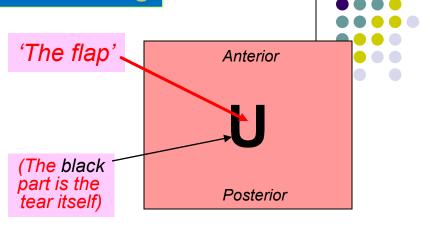
'Vitreous tension tearing the retina and peeling it back' sounds an awful lot like the description of retinal dialysis we saw a few slides ago. Are these Operculate fundamentally the same lesion?

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

Atrophic vitreous base.

Tension on the vitreous gets focused at this site, and tongue of vitreous tears the retina and peels it back,





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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

'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 Operculate fundamentally the same lesion?

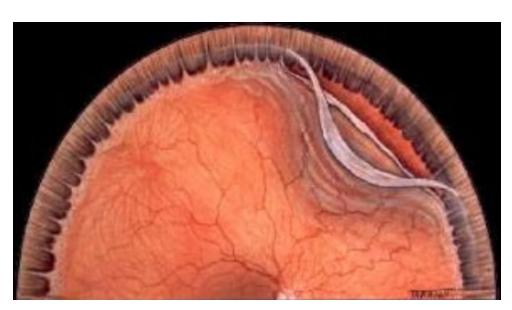
Not at all—in fact, in an important sense they are the **opposite** of one another. In a retinal dialysis, the disinserted retina peels posteriorly, away from the Atrophic vitreous base. In contrast, in a horseshoe tear the retina peels anteriorly, towards the vitreous base.

Lattice

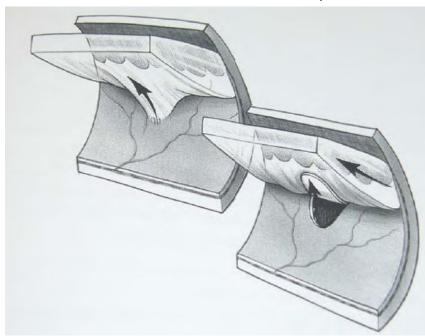
Tension on the vitreous gets focused at this site, and

tongue of vitreous tears the retina and peels it back,









Horseshoe tear: Retina peels toward vitreous base





Dialysis

What does operculated mean?

Horseshoe tear

What is an **Operculated hole**?

Atrophic hole





Dialysis

Horseshoe tear

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

What is an **Operculated hole**?

Atrophic hole





Dialysis

Horseshoe tear

What is an Operculated hole?

Atrophic hole

Lattice

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

OK, so what's an operculum?





Dialysis

Horseshoe tear

What is an **Operculated hole**?

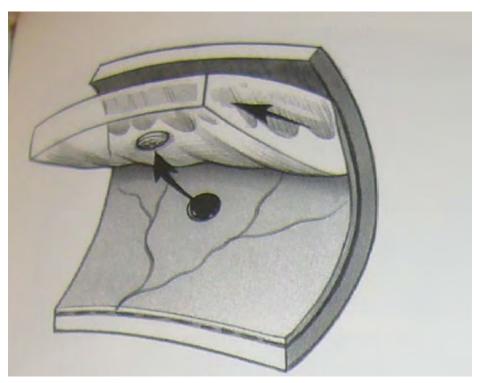
Atrophic hole

Lattice

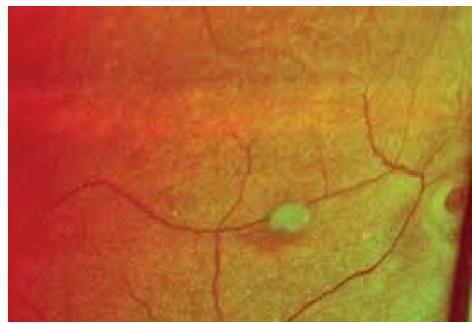
What does operculated mean? It means, 'covered by an operculum'

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**?

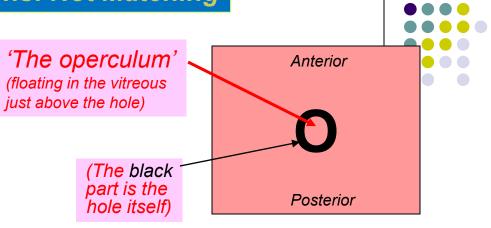
Atrophic hole

Lattice

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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?



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Dialysis

Horseshoe tear

What is an **Operculated hole?**

Atrophic hole

Lattice

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)



Dialysis

Horseshoe tear

Operculated hole

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."



Dialysis

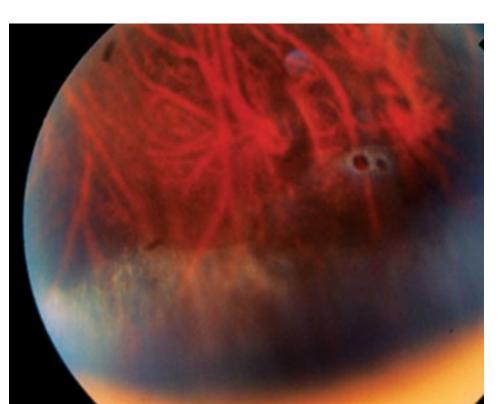
Horseshoe tear

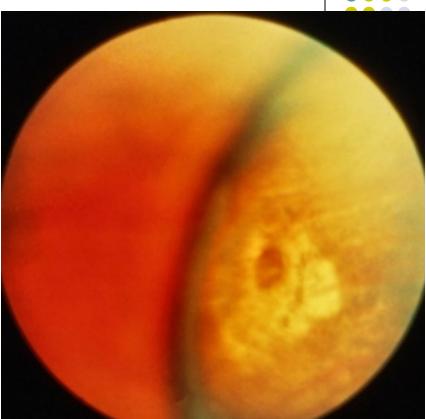
Operculated hole

What is an **Atrophic hole**?

Lattice

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.





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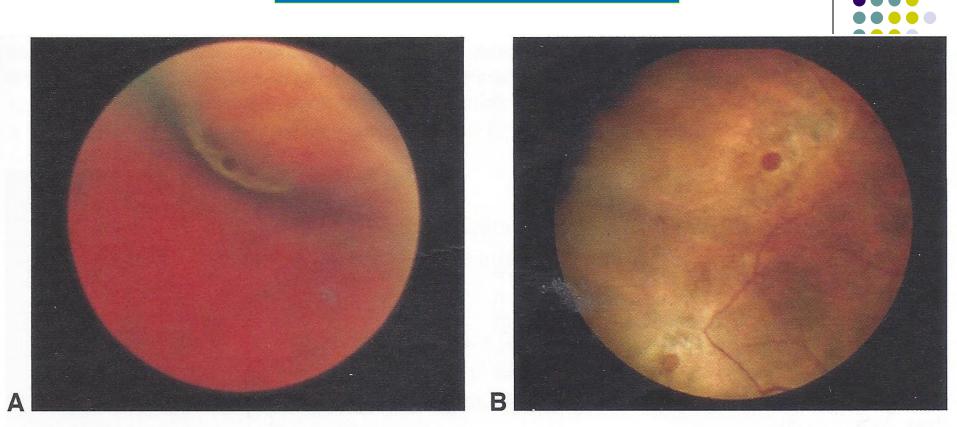


Figure 16-6 Lattice degeneration with atrophic hole. **A,** Fundus photograph of lattice degeneration with a small atrophic hole as viewed with scleral depression. **B,** Fundus photograph of an example of an atrophic hole as may be observed in lattice degeneration without scleral depression. (*Part A courtesy of Norman E. Byer, MD.*)



Dialysis

Horseshoe tear

Operculated hole

Atrophic hole

(We already know about Lattice)

Q

With respect to retinal breaks, what does it mean to say a pt is 'symptomatic'?



Symptomatic

Dialysis

Horseshoe tear

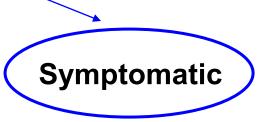
Operculated hole

Atrophic hole



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



Dialysis

Horseshoe tear

Operculated hole

Atrophic hole





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



	Symptomatic	Asymptomatic
Dialysis	?	?
Horseshoe tear		
Operculated hole		
Atrophic hole		
Lattice		



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



	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear		
Operculated hole		
Atrophic hole		
Lattice		



	Symptomatic	Asymptomatic
Dialysis	Yes	('Consider it')
Horseshoe tear		s there is 'no consensus' regarding dialyses should be treated
Operculated hole		
Atrophic hole		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	?	?
Operculated hole		
Atrophic hole		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole		
Atrophic hole		
Lattice		





	Symptomatic	Asympto	omatic
Dialysis	Yes	'Consid	ler it'
Horseshoe tear	Yes	No (unle	ess
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?			
Atroph			
Lattice			





	Symptomatic	Asympto	matic
Dialysis	Yes	'Consid	ler it'
Horseshoe tear	Yes	No (unle	988
	cumstances should you constances hoe tears? sociated with two words	sider treating	
Lattice			





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No unless
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degeneration		
Lattice		





	Symptomatic	Asympto	matic
Dialysis	Yes	'Consid	ler it'
Horseshoe tear	Yes	No (unle	9 SS
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degenerationIf the eye is significantly			
Lattice			





	Symptomatic	Asympton	natic
Dialysis	Yes	'Conside	er it'
Horseshoe tear	Yes	No (unles	SS
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degenerationIf the eye is significantly myopic			
Lattice			





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No unless
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degenerationIf the eye is significantly myopicIf the eye is or		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No unless
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degenerationIf the eye is significantly myopicIf the eye is aphakic or pseudophakic		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No unless
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears?If they are associated with lattice degenerationIf the eye is significantly myopicIf the eye is aphakic or pseudophakicIf there was a hx of two words in the fellow eye		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No unless
Opercula Under what circumstances should you consider treating asymptomatic horseshoe tears? If they are associated with lattice degenerationIf the eye is significantly myopicIf the eye is aphakic or pseudophakicIf there was a hx of retinal detachment in the fellow eye		
Lattice		



	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	?	?
Atrophic hole		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No (unless)	No
Atrophic hole		
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
nder what circumstances should you consider treating amptomatic operculated holes?		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
Inder what circumstances should y ymptomatic operculated holes? If there is three words	at the edge of the hole	





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
Inder what circumstances should you consider treating ymptomatic operculated holes? If there is ongoing vitreous traction at the edge of the hole		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
nder what circumstances should you consider treating amptomatic operculated holes? If there is ongoing vitreous traction at the edge of the hole aff the hole is		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
Inder what circumstances should you consider treating amptomatic operculated holes? If there is ongoing vitreous traction at the edge of the hole lif the hole is large		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
Inder what circumstances should you consider treating symptomatic operculated holes? If there is ongoing vitreous traction at the edge of the hole is large If two words is present		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No unless	No
Under what circumstances should you consider treating symptomatic operculated holes? If there is ongoing vitreous traction at the edge of the hole lifthe hole is large If vitreous hemorrhage is present		



	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No (unless)	No
Atrophic hole	?	?
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No (unless)	No
Atrophic hole	No	No
Lattice		





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No (unless)	No
Atrophic hole	No	No
Lattice	n/a	?

(Lattice itself can't be symptomatic—only a lesion *associated* with it can)





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole	No (unless)	No
Atrophic hole	No	No
Lattice	n/a	No (unless)





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole Under what circum Atro	No (unless) stances should you consider	r treating lattice?
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole Under what circum If two words Atro	No (unless) stances should you consider are present	r treating lattice?
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole Under what circum If horseshoe tear Atro	No (unless) stances should you consider s are present	r treating lattice?
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
If horseshoe tear	No (unless) stances should you consider s are present or	r treating lattice?
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole Under what circum If horseshoe tear AtroIf the eye is apha	the control of the co	r treating lattice?
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
Operculated hole Under what circum If horseshoe tear AtroIf the eye is aphaIf there was a hx	ikic or pseudophakic	r treating lattice? e fellow eye
Lattice	n/a	No unless





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes	No (unless)
If horseshoe tear AtroIf the eye is apha	the state of the s	
Lattice	n/a	No unless



	Symptomatic	Asymptomatic
Dialysis?	Yes	'Consider it'
Horseshoe tear?	Yes In general, which care	No (unless) ries the highest risk of RD?
Operculated hole?		
Atrophic hole?	INO	INO
Lattice?	n/a	No (unless)





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes In general, which care	No (unless) ries the highest risk of RD?
Operculated hole	Horseshoe tears	
Atrophic hole	NO	INO
Lattice	n/a	No (unless)





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes In general, which care	No (unless) ries the highest risk of RD?
Operculated hole	Horseshoe tears Why?	
Atrophic hole	NO	INO
Lattice	n/a	No (unless)





	Symptomatic	Asymptomatic
Dialysis	Yes	'Consider it'
Horseshoe tear	Yes In general, which care	No (unless) ries the highest risk of RD?
Operculated hole	Horseshoe tears Why?	
Atrophic hole	Because of ongoing NO	vitreous traction
Lattice	n/a	No (unless)

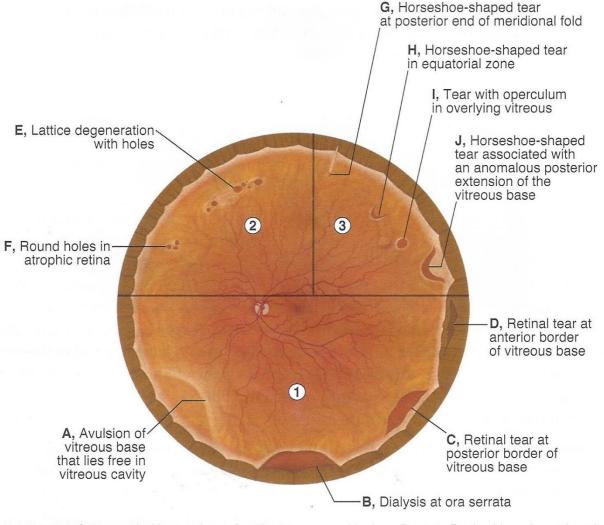


Figure 16-11 Schematic illustration of retinal tears and holes. Part 1, Retinal breaks at borders of the vitreous base. A, Avulsion of vitreous base that lies free in the vitreous cavity. B, Dialysis of the ora serrata. C, Retinal tear at the posterior border of the vitreous base. D, Retinal tear at the anterior border of the vitreous base. Part 2, Retinal breaks with areas of abnormal vitreoretinal interface (lattice degeneration). E, Lattice degeneration with holes. F, Round holes in atrophic retina. Part 3, Retinal breaks associated with abnormal vitreoretinal attachments. G, Horseshoe-shaped tear at the posterior end of a meridional fold. H, Horseshoe-shaped tear in the equatorial zone. I, Tear with operculum in the overlying vitreous. J, Horseshoe-shaped tear associated with an anomalous posterior extension of the vitreous base. (Illustration by Mark M. Miller.)



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 (pathology (2 of 2) 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 two words





- 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,
 - traction can pull through a chorioretinal scar)

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