Retinal Detachment

Two broad categories

? ?
Retinal Detachment

Two broad categories:

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Two categories
  - ?
  - ?
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

Two categories
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

Which of these is/are associated with trauma?

- Both RRD and TRD are associated with a history of trauma.
- Yes—RRD is associated with blunt trauma, whereas TRD is associated with penetrating trauma.
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

Which of these is/are associated with trauma?
Both RRD and TRD are associated with a history of trauma.
Retinal Detachment

Retinal Detachment

Rhegmatogenous (RRD)  Non-rhegmatogenous

Tractional (TRD)  Exudative (ERD)

*Which of these is/are associated with trauma?
Both RRD and TRD are associated with a history of trauma*

*Any differences in their respective trauma histories?
Retinal Detachment

Which of these is/are associated with trauma? Both RRD and TRD are associated with a history of trauma.

Any differences in their respective trauma histories? Yes—RRD is associated with *blunt* trauma, whereas TRD is associated with *penetrating* trauma.
Retinal Detachment

Rhegmatogenous (RRD)  Non-rhegmatogenous

Tractional (TRD)  Exudative (ERD)

What are the classic ophthalmoscopic descriptors of each RD type?

RRD: like a tin roof, like a belly dancer
TRD:
ERD:
Retinal Detachment

Retinal Detachment

Rhegmatogenous (RRD)  Non-rhegmatogenous

Tractional (TRD)  Exudative (ERD)

What are the classic ophthalmoscopic descriptors of each RD type?

RRD: Corrugated, undulating
TRD:
ERD:
What are the classic ophthalmoscopic descriptors of each RD type?

**RRD:** Corrugated, undulating

**TRD:** Convex vs concave

**ERD:** Dome-shaped, gravity-dependent
What are the classic ophthalmoscopic descriptors of each RD type?

RRD: Corrugated, undulating
TRD: Concave, taut
ERD:
Retinal Detachment

- Rhegmatogenous (RRD)
  - Corrugated, undulating
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

What are the classic ophthalmoscopic descriptors of each RD type?
- **RRD**: Corrugated, undulating
- **TRD**: Concave, taut
- **ERD**: something-shaped, something-dependent
What are the classic ophthalmoscopic descriptors of each RD type?

**RRD**: Corrugated, undulating

**TRD**: Concave, taut

**ERD**: Dome-shaped, gravity-dependent
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

What does the prefix rhegma mean?
What does the prefix *rhegma* mean? It translates as *break* or *tear*.
Retinal Detachment

Rhegmatogenous
(RRD)

Non-rhegmatogenous

Tractional
(TRD)

Exudative
(ERD)

The essential difference is that RRD is associated with a full-thickness retinal break…
Retinal Detachment

Rhegmatogenous (RRD) Non-rhegmatogenous

Tractional (TRD) Exudative (ERD)

The essential difference is that RRD is associated with a full-thickness retinal break...

...and TRD/ERD aren’t
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

The essential difference is that RRD is associated with a full-thickness retinal break…

What are the three types of retinal breaks?
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break…

Tears  Holes  Dialyses

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break…

Which of these is most commonly implicated in RRD?

Specifically, these are known as tears.
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Tears
Holes
Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break.

Non-rhegmatogenous

Tractional (TRD)

Tears
Holes
Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as 'horseshoe' tears.

Why are they called 'horseshoe' tears?

Because of their shape (see above)

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 anteriorly, producing the flap.
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Exudative (ERD)
  - Tractional (TRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears.

Why are they called ‘horseshoe’ tears?
Because of their shape (see above)
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break…

Specifically, these are known as \textit{horseshoe tears}.

Why are they called ‘horseshoe’ tears? Because of their shape (see above)

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 anteriorly, producing the flap.

\textbf{Tears} Holes Dialyses

Which of these is most commonly implicated in RRD?
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears.

Why are they called ‘horseshoe’ tears?
Because of their shape (see above)

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

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tears

Holes

Dialysis

Non-rhegmatogenous (ERD)

Exudative

Tractional (TRD)

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears

Why are they called ‘horseshoe’ tears?

Because of their shape (see above)

Where are they typically found?

In the far periphery, near the ora serrata

What is the ora serrata?

The location where the peripheral retina and the pars plana meet
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Holes

Tears

Holes

Dialyses

What is the ora serrata?
The location where the peripheral retina and the pars plana meet

Why are they called ‘horseshoe’ tears?
Because of their shape (see above)

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

Specifically, these are known as horseshoe tears

Non-rhegmatogenous

Exudative (ERD)

Tractional (TRD)

‘The flap’

(The black part is the tear itself)
Retinal Detachment

Rhegmatogenous (RRD)

Non-

Tractional (TRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears

Why are they called ‘horseshoe’ tears?
Because of their shape (see above)

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 anteriorly, producing the flap.

(The black part is the tear itself)
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break...

Which of these is most commonly implicated in RRD?
Specifically, these are known as horseshoe tears.

Why are they called 'horseshoe' tears?
Because of their shape (see above)

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 anteriorly, producing the flap.
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears.

Technically, this is incorrect. What is the correct name of the structure that gets torn?

The neurosensory retina

Neurosensory retina refers to the multilayered structure from the photoreceptors inward, whereas the retina is composed of the neurosensory retina and the RPE.

That said, like most ophthalmologists, the term retina here will mean the neurosensory portion, unless otherwise specified.

The flap

(The black part is the tear itself)

Anterior

Posterior

Tears

Holes

Dialyses

Why are they called 'horseshoe' tears?

Because of their shape (see above)

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 anteriorly, producing the flap.
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break, whereas non-rhegmatogenous detachment is not.

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears.

Technically, this is incorrect. What is the correct name of the structure that gets torn?

The neurosensory retina

The flap

(The black part is the tear itself)

on the vitreous gets focused at this site, and the tongue of vitreous tears the retina anteriorly, producing the flap.

Rhegmatogenous (RRD)

The neurosensory retina refers to the multilayered structure from the photoreceptors inward, whereas the retina is composed of the neurosensory retina and the RPE.

That said, like most ophthalmologists, the term retina here will mean the neurosensory portion, unless otherwise specified.
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break…

Technically, this is incorrect. What is the correct name of the structure that gets torn?
The neurosensory retina

What? Aren’t the terms retina and neurosensory retina interchangeable?

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears

Rhegmatogenous (RRD)
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break.

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as **horseshoe tears**

Rhegmatogenous (RRD)

Technically, this is incorrect. What is the correct name of the structure that gets torn?

The **neurosensory retina**

*What? Aren’t the terms retina and neurosensory retina interchangeable?*

Again, technically no. Neurosensory retina refers to the multilayered structure from the photoreceptors inward, whereas the retina is composed of the neurosensory retina and the RPE.

The flap

(The black part is the tear itself)

on the vitreous gets focused at this site, and the tongue of vitreous tears the retina anteriorly, producing the flap.

Anterior

Posterior
Retinal Detachment

The essential difference is that RRD is associated with a full-thickness retinal break...

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears.

Technically, this is incorrect. What is the correct name of the structure that gets torn?

The neurosensory retina.

What? Aren’t the terms retina and neurosensory retina interchangeable?

Again, technically no. Neurosensory retina refers to the multilayered structure from the photoreceptors inward, whereas the retina is composed of the neurosensory retina and the RPE.

That said, like most ophthos, the term retina here will mean the neurosensory portion, unless otherwise specified.

On the vitreous gets focused at this site, and the tongue of vitreous tears the retina anteriorly, producing the flap.
Retinal Detachment

The essential difference is that RRD is associated with a **full-thickness retinal break**…

Specifically, these are known as *horseshoe tears*.

Which of these is most commonly implicated in RRD?

Why are they called ‘horseshoe’ tears? Because of their shape (see above)

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

What event most commonly precipitates this tension? A posterior vitreous detachment

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 anteriorly, producing the flap.
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Exudative
  - Tractional (TRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Why are they called 'horseshoe' tears? Because of their shape (see above).

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 anteriorly, producing the flap.

What event most commonly precipitates this tension? A posterior vitreous detachment.

Specifically, these are known as horseshoe tears.
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tears

Holes

Dialyses

Which of these is most commonly implicated in RRD?

Specifically, these are known as horseshoe tears

Why are they called 'horseshoe' tears?

Because of their shape (see above)

Where are they typically found?

In the far periphery, near the ora serrata

What other location is a common site of retinal tears leading to RRD?

At the edge of lattice degeneration

Tractional (TRD)

Non-rhegmatogenous

Exudative (ERD)
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Tractional (TRD)

Why are they called 'horseshoe' tears? Because of their shape (see above)

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

What other location is a common site of retinal tears leading to RRD? At the edge of lattice degeneration

Which of these is most commonly implicated in RRD? Specifically, these are known as horseshoe tears
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

The essential difference is that RRD is associated with a **full-thickness retinal break**...

- Tears
- Holes
- Dialyses

What are the two types of retinal holes?
Retinal Detachment

- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

- Rhegmatogenous (RRD)
  - The essential difference is that RRD is associated with a full-thickness retinal break...

- Tears
- Holes
  - Atrophic
  - Operculated

What are the two types of retinal holes?
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Non-rhegmatogenous

Tractional (TRD)

What does operculated mean?

Tears

Holes

Dialysis

Atrophic

Operculated
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

- Tears
- Holes
  - Atrophic
  - Operculated

Non-rhegmatogenous

Tractional (TRD)

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

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Tears

Holes

Atrophic

Operculated

Non-rhegmatogenous

Tractional (TRD)

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

OK, so what’s an operculum?
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Non-rhegmatogenous

Tractional (TRD)

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

Holes

Atrophic

Operculated

Tears

Dialysis
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Non-rhegmatogenous

Tractional (TRD)

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 retinal 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?

Holes

- Atrophic
- Operculated

Tears

Dialysis
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Non-rhegmatogenous

Tractional (TRD)

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 retinal 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 (i.e., the operculum is the amputated flap; see above)
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break…

Tears  Holes  Dialyses

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

What is a retinal dialysis?
Retinal Detachment

Retinal Detachment

Rhegmatogenous (RRD) Non-rhegmatogenous

The essential difference is that RRD is associated with a full-thickness retinal break...

What is a retinal dialysis? A circumferential break in the far-peripheral retina
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

The essential difference is that RRD is associated with a full-thickness retinal break...
Retinal Detachment

Rhegmatogenous (RRD)

The essential difference is that RRD is associated with a full-thickness retinal break...

Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)

What is a retinal dialysis? A circumferential break in the far-peripheral retina

What is the inciting event? Usually blunt trauma
The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye
Retinal Detachment

Rhegmatogenous (RRD)

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?

--Posterior vitreous detachment (PVD)?
--Myopia?
--Lattice degeneration?
--Cataract surgery?
--Trauma?
--Hx RRD in fellow eye?

Of these, which is the biggest risk factor?

Non-rhegmatogenous
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

Of these, which is the biggest risk factor? PVD
Retinal Detachment

Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneratio
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
--The posterior lens capsule
--The ora serrata
--Retinal vessels
--The macula
--The optic nerve head
Retinal Detachment

**Rhegmatogenous (RRD)**

**Non-rhegmatogenous**

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

- Posterior vitreous detachment (PVD)
- Myopia
- Lattice degeneration
- Cataract surgery
- Trauma
- Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

- The posterior lens capsule
- The ora serrata
- Retinal vessels
- The macula
- The optic nerve head

In what manner (configuration) is the vitreous attached to the lens capsule?
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
--The posterior lens capsule
--The ora serrata
--The ora serrata
--The ora serrata
--The ora serrata

In what manner (configuration) is the vitreous attached to the lens capsule?
In the form of a ring
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
--The posterior lens capsule
--The ora serrata

In what manner (configuration) is the vitreous attached to the lens capsule?
In the form of a ring

What is the eponymous name for this ring-shaped attachment?
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

--The posterior lens capsule

What is the eponymous name for this ring-shaped attachment?

Wieger’s ligament
Retinal Detachment

Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

--The posterior lens capsule
--The ora serrata
--Retinal vessels
--The macula
--The optic nerve head

In what manner (configuration) is the vitreous attached to the ora serrata?

The vitreous base

In a band-like manner extending 2 mm anteriorly (i.e., onto the pars plana of the ciliary body) and 3 mm posteriorly (i.e., onto the peripheral retina).
Retinal Detachment

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

--The posterior lens capsule
--The ora serrata
--Retinal vessels
--The macula
--The optic nerve head

In what manner (configuration) is the vitreous attached to the ora serrata?
In a band-like manner extending # mm anteriorly (ie, onto the pars plana of the ciliary body) and # mm posteriorly (ie, onto the peripheral retina).
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

- Posterior vitreous detachment (PVD)
- Myopia
- Lattice degeneration
- Cataract surgery
- Trauma
- Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

- The posterior lens capsule
- The ora serrata
- Retinal vessels
- The macula
- The optic nerve head

In what manner (configuration) is the vitreous attached to the ora serrata? In a band-like manner extending 2 mm anteriorly (ie, onto the pars plana of the ciliary body) and 3 mm posteriorly (ie, onto the peripheral retina)
The AAO Preferred Practice Pattern for RRD lists five risk factors:
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
--The posterior lens capsule
--The ora serrata
--Retinal vessels
--The macula
--The optic nerve head

In what manner (configuration) is the vitreous attached to the ora serrata?
In a band-like manner extending 2 mm anteriorly (i.e., onto the pars plana of the ciliary body) and 3 mm posteriorly (i.e., onto the peripheral retina).

What is the name for this band-shaped attachment?
--The ora serrata
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors:
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?
--The posterior lens capsule
--The ora serrata
--Retinal vessels
--The macula
--The optic nerve head

In what manner (configuration) is the vitreous attached to the ora serrata?
In a band-like manner extending 2 mm anteriorly (i.e., onto the pars plana of the ciliary body) and 3 mm posteriorly (i.e., onto the peripheral retina).

What is the name for this band-shaped attachment?
The vitreous base

--The ora serrata
Retinal Detachment

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they? --Posterior vitreous detachment (PVD) --Myopia --Lattice degeneration --Cataract surgery --Trauma --Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye? --The posterior lens capsule? --The ora serrata? --Retinal vessels? --The macula? --The optic nerve head?

In what order do these sites detach in a typical PVD?
Retinal Detachment

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?

- Posterior vitreous detachment (PVD)
- Myopia
- Lattice degeneration
- Cataract surgery
- Trauma
- Hx RRD in fellow eye

What are the five major locations of vitreous attachment in the eye?

- The posterior lens capsule
- The ora serrata
- Retinal vessels: 1st
- The macula: 2nd
- The optic nerve head: 3rd

In what order do these sites detach in a typical PVD?

Rhegmatogenous (RRD)

Non-rhegmatogenous (Exudative; ERD)

Tractional (TRD)
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In what order do these sites detach in a typical PVD?

What about Wieger’s ligament and the base? When do they detach in a PVD?

As for Wieger’s ligament: Given its extremely anterior location, it shouldn’t be surprising that it is spared in a posterior vitreous detachment.
Retinal Detachment

Retinal Detachment

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- The optic nerve head: 3\textsuperscript{rd}

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OK then, is there such a thing as an anterior vitreous detachment?
Retinal Detachment

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OK then, is there such a thing as an anterior vitreous detachment?
Yes. As noted above, the base never detaches.

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Under what circumstances does such an anterior detachment occur?

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Retinal Detachment

OK then, is there such a thing as an anterior vitreous detachment? Yes. As noted above, the base never detaches. However, there are occasions when Wieger’s lets go, and this is the definition of an anterior detachment.

Under what circumstances does such an anterior detachment occur? Usually in the course of an intracapsular cataract extraction (ICCE), which has long fallen out of favor except under the most unusual of clinical circumstances.

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Posterior vitreous detachment (PVD)

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When (ie, in what age range) do PVDs typically occur?

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When (ie, in what age range) do PVDs typically occur?
45-65

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PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?

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Why is the symptomatic/asymptomatic distinction clinically important? Because symptomatic pts are at significantly higher risk of an RRD

What are these groups? Symptomatic and asymptomatic

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What symptoms are being referenced here?

Photopsias and floaters

When (ie, in what age range) do PVDs typically occur?

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Retinal Detachment

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Retinal Detachment

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Photopsias
Symptomatic

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What are photopsias?
Photopsias
Flashes of light
Mechanical stimulation of the retina (this is why you ‘see stars’ if you bang your head or rub your eyes)
Source of mechanical stimulation in PVD is vitreous traction, ie, the vitreous tugging on the retina
Photopsias are more noticeable under low-light conditions
Retinal Detachment

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What symptoms are being referenced here?
Photopsias and floaters

What causes photopsias?
Mechanical stimulation of the retina (you 'see stars' if you bang your head or rub your eyes)

What is the source of mechanical stimulation in PVD?
Vitreous traction, ie, the vitreous tugging on the retina

Are photopsias more noticeable under bright, or low-light conditions?
Low light

When (ie, in what age range) do PVDs typically occur?
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What symptoms are referred to as photopsias and floaters?
Photopsias and floaters

PVDs can be divided into symptomatic and asymptomatic groups based on an important clinical characteristic.

Photopsias
Symptomatic
Retinal Detachment

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When (ie, in what age range) do PVDs typically occur?

45-65

When pts report seeing floaters, are they actually seeing floaters?

No—It is physically impossible to see floaters

Why is it impossible to see floaters?

For two reasons:
- As floaters are located within the vitreous, there is no incident light reflected from them toward the macula
- Even if incident light was present, there is no refractive apparatus between the floaters and the fovea to produce an image

OK then, what are pts seeing when they report floaters?

They are seeing the shadows floaters produce when they block light heading towards the macula

Why is the symptomatic/asymptomatic distinction clinically important?

Because symptomatic pts are at significantly higher risk of an RRD

What symptoms are being referred to here?

Photopsias and floaters

PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?

Symptomatic and asymptomatic
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When (ie, in what age range) do PVDs typically occur?

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What group of otherwise normal eyes often detach at a younger age?

Myopic eyes

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What are these groups? Symptomatic and asymptomatic

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45-65

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Myopic eyes

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PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?

Symptomatic and asymptomatic

What symptoms are being referenced here?

Photopsias and floaters

floaters

What group of otherwise normal eyes often detach at a younger age?

Myopic eyes

When (ie, in what age range) do PVDs typically occur?

45-65

Posterior vitreous detachment (PVD)
Retinal Detachment

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--Posterior vitreous detachment (PVD)
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--Hx RRD in fellow eye

What are three main types of floaters? What are they?

- Heme
- Clumps of pigment/pigmented cells
- Epipapillary glial tissue

PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?

Symptomatic and asymptomatic

What symptoms are being referenced here? What group of otherwise normal eyes often detach at a younger age?

Photopsias and floaters. Myopic eyes.
Retinal Detachment

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- Symptomatic
- Asymptomatic

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What symptoms are being referenced here?
Photopsias and floaters

There are three main types of floaters.

- Heme
- Clumps of pigment/pigmented cells
- Epipapillary glial tissue

What is the source of the heme?
Torn retinal vessels

Is there a relationship between the amount of vitreous heme and the risk of a retinal tear?
Yes—the risk is directly proportional to it

What is the source of the pigment/pigmented cells?
The RPE

How does a retinal tear result in pigment/pigmented cells floating in the vitreous cavity?
The cells/pigment are liberated from their normal location by the tearing away of the retina

What is the colorful description for the appearance of pigment/pigmented cells in the anterior vitreous?
'Tobacco dust'

What is the eponymous name for finding pigment/pigmented cells in the anterior vitreous?
Shafer's sign

It is very important to record the status of Shafer's sign (positive or negative) on all acute PVD pts!

What does 'epipapillary glial tissue' refer to?
The attachment of the posterior vitreous face to the retina encircling the optic disc. When it comes loose during a PVD, this tissue often forms a large ring-shaped floater.

What is the eponymous name for this ring-shaped floater?
A Weiss ring
Retinal Detachment

The AAO Preferred Practice Pattern for RRD lists five risk factors--what are they?
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

When (ie, in what age range) do PVDs typically occur?
45-65

What group of otherwise normal eyes often detach at a younger age?
Myopic eyes

PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?
Symptomatic and asymptomatic

Why is the symptomatic/asymptomatic distinction clinically important?
Because symptomatic pts are at significantly higher risk of an RRD

What symptoms are being referenced here?
Photopsias and floaters

There are three main types of floaters. What are they?
--Heme
--Clumps of pigment/pigmented cells
--Epipapillary glial tissue

What is the source of the heme?
Torn retinal vessels

Is there a relationship between the amount of vitreous heme and the risk of a retinal tear?
Yes--the risk is directly proportional to it

What is the source of the pigment/pigmented cells?
The RPE

How does a retinal tear result in pigment/pigmented cells floating in the vitreous cavity?
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Retinal Detachment

Rhegmatogenous (RRD)
Non-rhegmatogenous
Exudative (ERD)
Tractional (TRD)

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

When (ie, in what age range) do PVDs typically occur?
45-65

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Retinal Detachment

The AAO Preferred Practice Pattern lists five risk factors:
- Posterior vitreous detachment (PVD)
- Myopia
- Lattice degeneration
- Cataract surgery
- Trauma
- Prior RRD in fellow eye

When do PVDs typically occur?
45-65 years

What group of otherwise normal eyes often detach at a younger age?
Myopic eyes

PVDs can be divided into two groups based on an important clinical characteristic.
What are these groups?
- Symptomatic
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Why is the symptomatic/asymptomatic distinction clinically important?
Because symptomatic patients are at significantly higher risk of an RRD

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Retinal Detachment

**The AAO Preferred Practice Pattern for RRD** lists five risk factors—what are they?

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When (ie, in what age range) do PVDs typically occur?

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When (ie, in what age range) do PVDs typically occur?
45-65

What group of otherwise normal eyes often detach at a younger age?
Myopic eyes

PVDs can be divided into two groups based on an important clinical characteristic.
The symptomatic and asymptomatic distinction.

Why is the symptomatic/asymptomatic distinction clinically important?
Because symptomatic pts are at significantly higher risk of an RRD.

What symptoms are being referenced here?
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**PVDs can be divided into two groups based on an important clinical characteristic:**
- Symptomatic
- Asymptomatic

**Why is the symptomatic/asymptomatic distinction clinically important?**
- Symptomatic pts are at significantly higher risk of an RRD

**What symptoms are being referenced here?**
- Photopsias
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Retinal Detachment

The AAO Preferred Practice Pattern

--Posterior vitreous detachment
--Myopia
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--Hx RRD in fellow eye

Non-rhegmatogenous (ERD)

Rhegmatogenous (RRD)

The AAO Preferred Practice Pattern lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)
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--Lattice degeneration
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--Trauma
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When (ie, in what age range) do PVDs typically occur?

45-65

What group of otherwise normal eyes often detach at a younger age?

Myopic eyes

PVDs can be divided into two groups based on an important clinical characteristic. What are these groups?

Symptomatic and asymptomatic

Why is the symptomatic/asymptomatic distinction clinically important?

Because symptomatic pts are at significantly higher risk of an RRD

What symptoms are being referenced here?

Photopsias and floaters

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A Weiss ring
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"Weiss' ring"
Retinal Detachment

The AAO Preferred Practice Pattern lists five risk factors:
- Posterior vitreous detachment (PVD)
- Myopia
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- History of RRD in the fellow eye

When (ie, in what age range) do PVDs typically occur?
- Posterior vitreous detachment (PVD)

What group of otherwise normal eyes often detach at a younger age?
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PVDs can be divided into two groups based on an important clinical characteristic.
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Why is the symptomatic/asymptomatic distinction clinically important?
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Retinal Detachment

The AAO Preferred Practice Pattern for Retinal Detachment lists five risk factors:

- Posterior vitreous detachment (PVD)
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When (ie, in what age range) do PVDs typically occur?

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Myopic eyes

PVDs can be divided into two groups based on an important clinical characteristic.

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Why is the symptomatic/asymptomatic distinction clinically important?

Because symptomatic patients are at significantly higher risk of developing a rhegmatogenous retinal detachment (RRD).

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Is myopia a significant risk factor? Yes.

Is RRD risk proportional to the degree of myopia? Yes.

Is RRD risk proportional to axial length (which is of course proportional to the degree of myopia)? Yes.
Retinal Detachment

The AAO Preferred Practice Pattern for RRD lists five risk factors:
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Is myopia a significant risk factor? Yeah buddy. Over half of RRDs occur in myopic eyes!
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Rhegmatogenous (RRD)

Non-rhegmatogenous

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--Trauma
--Hx RRD in fellow eye

Is myopia a significant risk factor? Yeah buddy. Over half of RRDs occur in myopic eyes!

Is RRD risk proportional to the degree of myopia? Yes

Is RRD risk proportional to axial length (which is of course proportional to the degree of myopia)? Yes
Retinal Detachment

Rhegmatogenous (RRD)  Non-rhegmatogenous

The AAO Preferred Practice Pattern for RRD lists five risk factors:
--Posterior vitreous detachment (PVD)
--Myopia
--Lattice degeneration
--Cataract surgery
--Trauma
--Hx RRD in fellow eye

How prevalent is lattice in the population?
Quite -- it is found in 5-10% of the population.

How prevalent is lattice in pts with an RRD?
It is found in 1/5 to 1/3 of eyes with an RRD.

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

Is it sporadic, or familial?
While not inevitable, a familial predisposition is often found.
Retinal Detachment

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Non-rhegmatogenous

Tractional (TRD)

Exudative (ERD)
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Myopic
Retinal Detachment

**Non-rhegmatogenous**
- Exudative (ERD)
- Tractional (TRD)

**Rhegmatogenous** (RRD)

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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;
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Rhegmatogenous

Non-rhegmatogenous
Retinal Detachment

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Myopia

Lattice degeneration

Cataract surgery

Trauma

Hx RRD in fellow eye

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

Is it more common in myopic, or hyperopic eyes?
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Is it sporadic, or familial?
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Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

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Who is at greater risk for RRD after cataract surgery…
--Males, or females?

Younger
Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous

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Retinal Detachment

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**Non-rhegmatogenous**

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What intraop event significantly increases the risk of RRD?
Retinal Detachment

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What intraop event significantly increases the risk of RRD?
Rupture of the posterior capsule
Retinal Detachment

Retinal Detachment

Non-rhegmatogenous

Exudative (ERD)

Tractional (TRD)

The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?

--Posterior vitreous detachment (PVD)--Myopia--Lattice degeneration--Cataract surgery

--Trauma--Hx RRD in fellow eye

Are we talking about blunt, or penetrating trauma?

Both

If blunt trauma causes a retinal break, it typically happens in one of two places relative to the site of the trauma. Where are those two places, and what terms are used to describe them?

--A break in the retina adjacent to the injury site is a coup injury

--A break in the retina opposite to the injury site is a contrecoup injury

Young people have a higher rate of eye trauma than do older individuals. If a young person sustains a break-producing injury, is it expected that they will have an RRD soon thereafter?

No, only about 10% present in the immediate post-injury period. Only about 50% will present within the first 8 months.

Why the delay?

Because young people's vitreous is formed (ie, not yet liquefied), it is not able to flow through an open retinal break. Only later, if/when trauma-induced vitreous damage leads to liquefaction, will a young person experience an RRD.
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What effect does a history of nontraumatic RRD in one eye have on the lifetime risk of experiencing a nontraumatic RRD in the fellow eye?
The AAO Preferred Practice Pattern for RRD lists five risk factors—what are they?
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What effect does a history of nontraumatic RRD in one eye have on the lifetime risk of experiencing a nontraumatic RRD in the fellow eye? It increases it by about 10%.
Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

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Vitreoretinal elements pulling hard enough on the neurosensory retina to distract it from its normal position apposing the RPE
What is the underlying pathophysiology in TRD?

Vitreoretinal elements pulling hard enough on the neurosensory retina to distract it from its normal position apposing the RPE.

Retinal Detachment

- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)

What is the most common cause of these vitreoretinal membrane?

- Proliferative retinopathy (e.g., PDR; CRVO; BRVO)
- Penetrating trauma

Does penetrating trauma lead to proliferative vitreoretinopathy?

No, it leads to proliferative vitreoretinopathy.
What is the underlying pathophysiology in TRD?
Vitreoretinal elements pulling hard enough on the neurosensory retina to distract it from its normal position apposing the RPE

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What is the most common cause of these vitreoretinal membrane? Proliferative retinopathy (eg, PDR; CRVO; BRVO)

What is another, completely different sort of common cause? Penetrating trauma Doesn't penetratretinopathy? No, it leads to proliferative vitreoretinopathy.

Retinal Detachment

- Rhegmatogenous (RRD)
- Non-rhegmatogenous
  - Tractional (TRD)
  - Exudative (ERD)
What is the underlying pathophysiology in TRD?
Vitreoretinal elements pulling hard enough on the neurosensory retina to distract it from its normal position apposing the RPE

Retinal Detachment

Non-rhegmatogenous
Exudative (ERD)

Retinal Detachment

Tractional (TRD)

What is the most common cause of these vitreoretinal membrane?
Proliferative retinopathy (eg, PDR; CRVO; BRVO)

What is another, completely different sort of common cause?
Penetrating trauma

Does penetrating trauma lead to proliferative retinopathy?
What is the underlying pathophysiology in TRD?
Vitreoretinal elements pulling hard enough on the neurosensory retina to distract it from its normal position apposing the RPE

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<table>
<thead>
<tr>
<th>Non-rhegmatogenous (ERD)</th>
<th>Rhegmatogenous (RRD)</th>
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How does proliferative retinopathy lead to TRD?

Recall that, by definition, PDR vessels break through the internal limiting membrane (ILM), and thus are in contact with the posterior hyaloid face. Some vessels will use the posterior hyaloid as a 'scaffold' on which to grow. Further, remember that proliferative vessels don’t travel solo—they bring glial and other fibroblastic-type cells along. These fellow-travelers provide a contractile element to the neovascular fronds.

So, contraction of these fibrovascular elements leads to TRD? It contributes, but is not the main source of traction.

What is the main source of traction?

Our old friend **PVD**—or more correctly, a partial PVD. New vessels crawling on the posterior hyaloid face induces a partial PVD. Some vessels prevent the PVD from propagating (hence its partial status); others are suspended between the contracting vitreous and the retina, resulting in traction on the retina.
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To be clear: When we refer to penetrating trauma, what structure specifically is being penetrated?

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- Tractional (TRD)
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The term can refer to the formation of vitreous membranes secondary to a break in the NS retina, or to the membranes themselves

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So you can see how penetrating (NS retina) trauma can lead to PVR and TRD--the traumatic break provides the pathway by which the contractile cells can access the vitreous.

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Wait--RRD involves a break in the retina. Why doesn’t PVR develop after RRD?
In fact it does, frequently.

What unhappy role does PVR play in the long-term outcome of surgery to repair RRD?
PVR is the most common cause of long-term RRD surgery failure.
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Under normal circumstances, what prevents fluid from accumulating there?

The pumping action of the RPE

This implies what about the underlying pathophysiology of ERD?

That it is due to either:
- a rate of fluid accumulation too high for the RPE to keep up;
- a failure of RPE pumping function (or a combo of both).
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In a nutshell, what is going on in ERD?
The accumulation of fluid in the potential space between the NS retina and the RPE

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(or a combo of both)
Retinal Detachment

In a nutshell, what is going on in ERD?
The accumulation of fluid in the potential space between the NS retina and the RPE

Under normal circumstances, what prevents fluid from accumulating there?
The pumping action of the RPE

What two broad categories of dz are commonly associated with hyperexudation?
--Inflammatory
--Neoplastic

--a rate of fluid accumulation too high for the RPE to keep up, or
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*What inflammatory conditions are associated with ERD?*

-- Vogt-Koyanagi-Harada (VKH)
-- Posterior scleritis
-- Malignant hypertension
-- Toxemia of pregnancy

Exudative (ERD)
Retinal Detachment

In a nutshell, what is going on in ERD? The accumulation of fluid in the potential space between the NS retina and the RPE

Under normal circumstances, what prevents fluid from accumulating there? The pumping action of the RPE

What two broad categories of disease are commonly associated with hyperexudation? --Inflammatory --Neoplastic

And given VKH is in the DDx, what other condition must be considered as well? SO--sympathetic ophthalmia. (If you don’t understand why SO must be included, check out the VKH/SO slide-set.)

What inflammatory conditions are associated with ERD? --Vogt-Koyanagi-Harada (VKH) --Posterior scleritis --Malignant hypertension --Toxemia of pregnancy

Hyper-exudation

Exudative (ERD)

RPE dysfunction

Inflammation

Neoplasm
**Retinal Detachment**

*In a nutshell, what is going on in ERD?*

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(or a combo of both)

Which broad categories of neoplasms are associated with ERD?
--
--

Retinal Detachment

Rhegmatogenous (RRD)

Non-rhegmatogenous

Exudative (ERD)

Tractional (TRD)

Hyper-exudation

RPE dysfunction

Neoplasm

Inflammation
In a nutshell, what is going on in ERD?
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--Inflammatory
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Which broad categories of neoplasms are associated with ERD?
--Choroidal
--Metastases
Retinal Detachment

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Under normal circumstances, what prevents fluid from accumulating there?
The pumping action of the RPE

What two broad categories of dz are commonly associated with hyperexudation?
--Inflammatory
--Neoplastic

--a rate of fluid accumulation too high for the RPE to keep up, or
--a failure of RPE pumping function
(or a combo of both)

Which broad categories of neoplasms are associated with ERD?

What are the two most common causes for each?
--Choroidal, especially and
--Metastases, especially and

Exudative (ERD)

Hyper-exudation

Neoplasm

Neoplasm

RPE dysfunction

Choroidal

Metastatic
Retinal Detachment

In a nutshell, what is going on in ERD?
The accumulation of fluid in the potential space between
the NS retina and the RPE

Under normal circumstances, what prevents fluid from
accumulating there?
The pumping action of the RPE

What two broad categories of dz are commonly associated
with hyperexudation?
--Inflammatory
--Neoplastic

--a rate of fluid accumulation too high for the RPE to
keep up, or
--a failure of RPE pumping function
(or a combo of both)

Which broad categories of neoplasms are associated with ERD?
What are the two most common causes for each?
--Choroidal, especially hemangioma and melanoma
--Metastases, especially breast and lung

Exudative
(ERD)

Hyper-
exudation

RPE
dysfunction

Neoplasm

Choroidal
Metastatic
In a nutshell, what is going on in ERD?
The accumulation of fluid in the potential space between the NS retina and the RPE

Under normal circumstances, what prevents fluid from accumulating there?
The pumping action of the RPE

This implies what about the underlying pathophysiology of ERD?

What condition, often but not always associated with ERD, is a classic example of RPE dysfunction?

--a failure of RPE pumping function
(or a combo of both)
In a nutshell, what is going on in ERD? 
The accumulation of fluid in the potential space between the NS retina and the RPE

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This implies what about the underlying pathophysiology of ERD? 
What condition, often but not always associated with ERD, is a classic example of RPE dysfunction? Central serous chorioretinopathy (CSC)

---a failure of RPE pumping function 
(or a combo of both)
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What condition, often but not always associated with ERD, is a classic example of RPE dysfunction? Central serous chorioretinopathy (CSC)

--a failure of RPE pumping function
(or a combo of both)

(Note: ERD in CSC is not due solely to RPE dysfunction; choroidal hyperpermeability is a component as well)
Retinal Detachment

We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it...Questions about this condition could be Retina-based or Peds-based...That condition is...
Retinal Detachment

We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease.
We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…**Coats disease**. In that regard: --Age of presentation?
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…**Coats disease.** In that regard:

--Age of presentation? **5 years**
Retinal Detachment

We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

--Age of presentation? **5 years**

--Gender?
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

--Age of presentation? **5 years**
--Gender? **Male**
We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:
---Age of presentation? 5 years
---Gender? Male
---Laterality?
Retinal Detachment

We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…**Coats disease.** In that regard:

--Age of presentation? **5 years**
--Gender? **Male**
--Laterality? **Unilateral**
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:
--Age of presentation? 5 years
--Gender? Male
--Laterality? Unilateral
--Presenting sign?
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

--Age of presentation? 5 years
--Gender? Male
--Laterality? Unilateral
--Presenting sign? Leukocoria
We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it...Questions about this condition could be Retina-based or Peds-based...That condition is...**Coats disease**. In that regard:

--Age of presentation? **5 years**

--Gender? Can Coats present in adulthood?

--Laterality? **Unilateral**

--Presenting sign? **Leukocoria**
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

---Age of presentation? 5 years
---Gender? Male
---Laterality? Unilateral
---Presenting sign? Leukocoria

Can Coats present in adulthood? Yes
We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

--Age of presentation? **5 years**
--Gender? **Male**
--What percent of cases are male? **About 70-80%**
--Presenting sign? **Leukocoria**
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--Age of presentation? 5 years
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--Age of presentation? 5 years
--Gender? Male
--Laterality? Unilateral

What percent of cases are unilateral?
We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…**Coats disease**. In that regard:

---Age of presentation? 5 years
---Gender? **Male**
---Laterality? **Unilateral**

*What percent of cases are unilateral? About 70-80%*
Retinal Detachment

Non-rhegmatogenous

Rhegmatogenous

We can’t talk about ERD without mentioning an extremely OKAP-worthy condition associated with it…Questions about this condition could be Retina-based or Peds-based…That condition is…Coats disease. In that regard:

--Age of presentation? 5 years
--Gender? Male
--Laterality? Unilateral
--Presenting sign? Leukocoria

What feared condition is Coats on the DDx for?
Retinal Detachment

We can't talk about ERD without mentioning an extremely OKAP-worthy condition associated with it...Questions about this condition could be Retina-based or Peds-based...That condition is...Coats disease. In that regard:

--Age of presentation? 5 years
--Gender? Male
--Laterality? Unilateral
--Presenting sign? Leukocoria

What feared condition is Coats on the DDx for? Retinoblastoma

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Rhegmatogenous

Non-rhegmatogenous

Exudative (ERD)

Tractional (TRD)