



Retina Associates

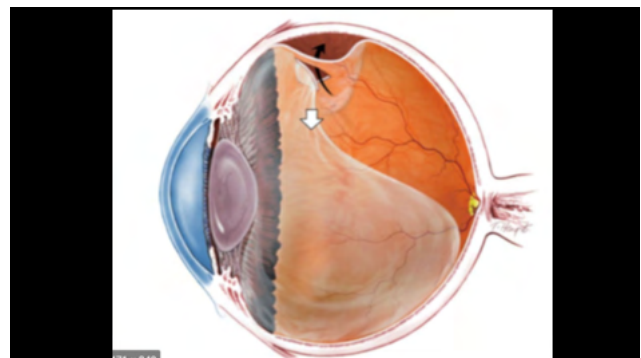
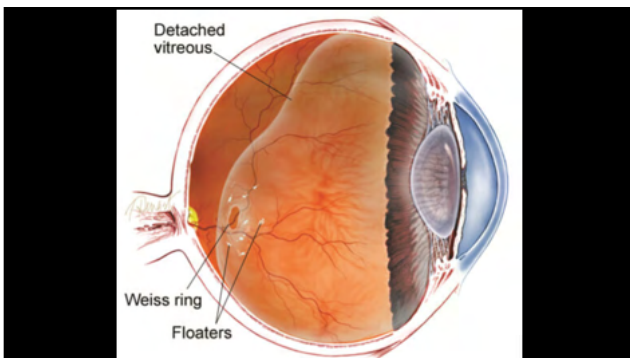
- Louisville office since 2013
- Jeffersonville office since May 2020

A map showing the locations of Retina Associates offices in Louisville, KY and Jeffersonville, IN, with labels for major roads and the Ohio River.

GOALS

- SIMPLIFYING THE COMPLEXITIES
- DEVELOP A STRATEGY FOR EVALUATING THE PVD PATIENT
- UNDERSTAND DIFFERENT SURGICAL APPROACHES TO RETINAL DETACHMENT REPAIR
- UNDERSTAND THE IMPORTANCE OF MACULA STATUS IN TIMING OF REPAIR
- IDENTIFY FACTORS THAT INFLUENCE THE TYPE OF PROCEDURE RECOMMENDED

A stylized blue icon of an eye with a white pupil and iris, looking towards the right.



Floater and Flashes

- Characteristic of flashes important
 - Distinguish from an ocular migraine
- *Symptoms the same for multiple conditions*
 - Acute PVD with no peripheral pathology
 - Acute PVD with peripheral tear
 - Acute PVD with retinal detachment

Floater

- Acute floaters – mainly PVD, but other diseases as well
- Chronic floaters – more than 3 months
 - Usually neuroadapt after a month at most
 - In disabling cases, surgical intervention can be helpful

Exam for Floater and Flashes

- Examination
 - Anterior vitreous – slit lamp
 - Peripheral retina – slit lamp
 - Indirect Ophthalmoscopy
 - Scleral depression
- Imaging - Is Optos good enough?



ISOLATED FLASHES: 5.3%

FLOATERS ALONE: 16.5%

BOTH FLASHES AND FLOATERS: 20.0%

RETINAL/VITREOUS HEMORRHAGE: 30.0%

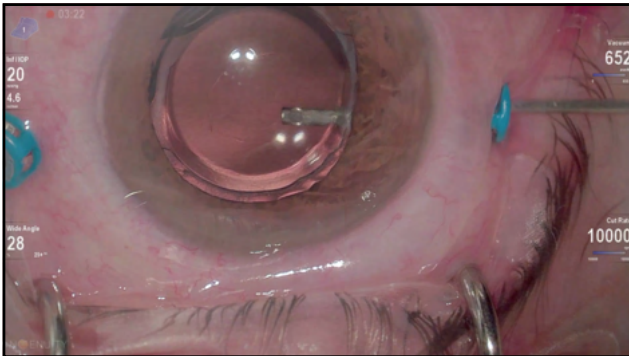
10 OR MORE FLOATERS/CLOUD: 20 TIMES RISK

If Unsure, When to Refer?

- By history
 - Severe symptoms (curtain/loss of vision)
 - High risk patient – fellow eye, family history
- By exam
 - Vitreous pigment or hemorrhage
 - Uncertain exam

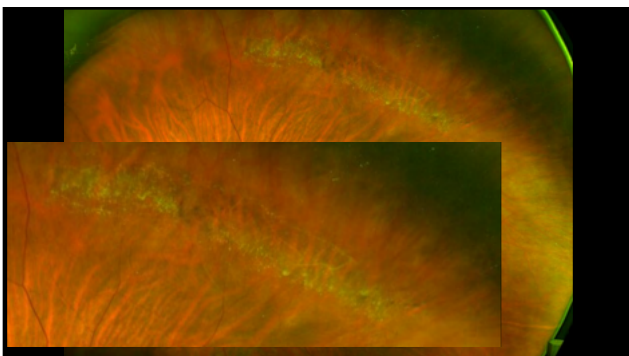
When Floaters Don't Go Away

- By history
 - Disabling to daily functioning
 - Have to think about seeing
- By exam
 - Vitreous clumps anteriorly
 - Not always evident on exam



Lattice

- Oval or straight area of retinal thinning in circumferential pattern
- 8% of population
- Increased risk of retinal detachment
- Treatment

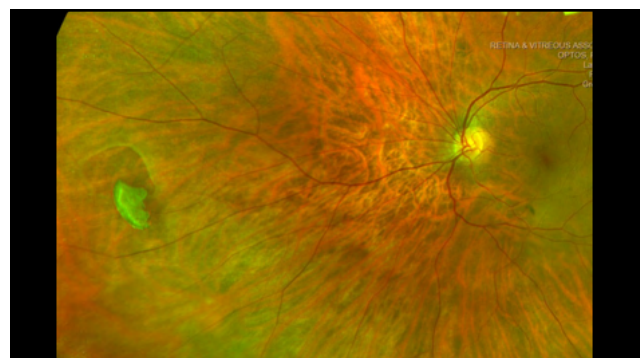


When to treat?



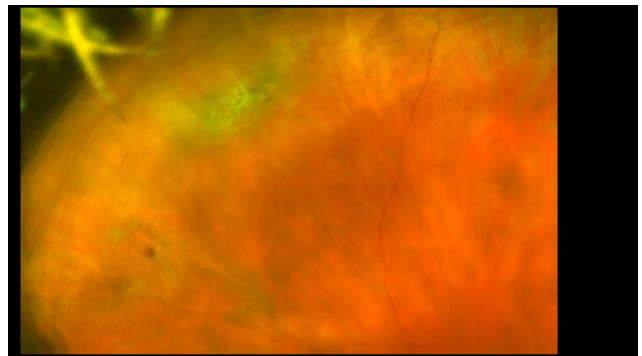
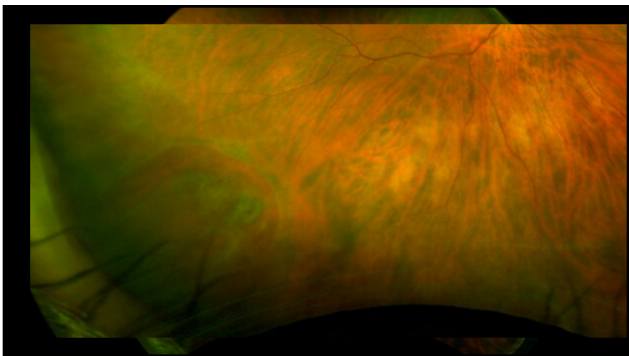
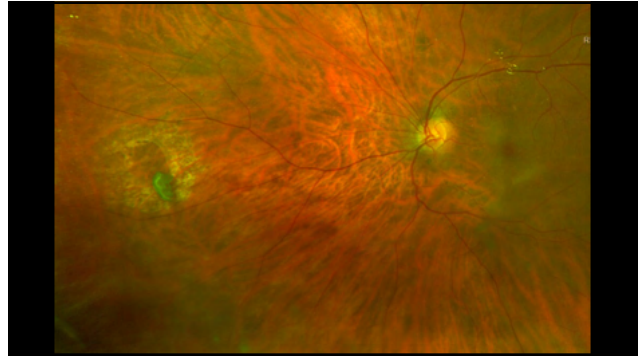
Peripheral Retinal Tears

- Also known as Horseshoe Tears (HST)
- Asymptomatic - uncommon
- Symptomatic
 - Floaters & Flashes
- Untreated, 50% chance of retinal detachment



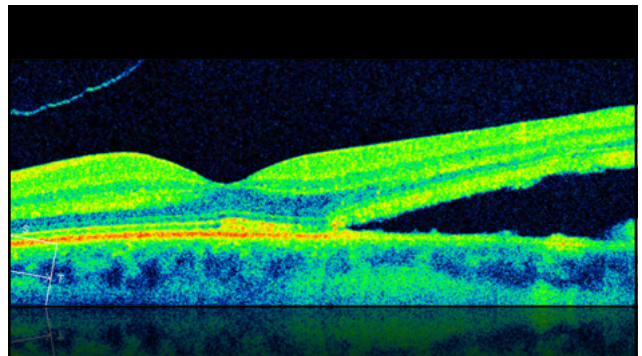
HST Treatment

- Primarily treat with laser retinopexy
 - In office laser with indirect or slit lamp laser
- Can also treat with cryotherapy
- 80% of patients – that's all they need
 - 5% get RD, 5% another issue, 10% another HST



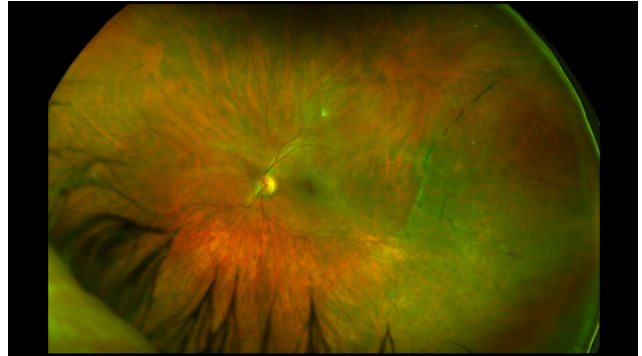
Retinal Detachment (RD)

- Rhegmatogenous (RRD) – retinal tear or hole caused RD
 - Macula on – good vision, exam, OCT
 - Macula off – poor vision, exam, OCT
- Serous Retinal Detachment
- Tractional Retinal Detachment (TRD)

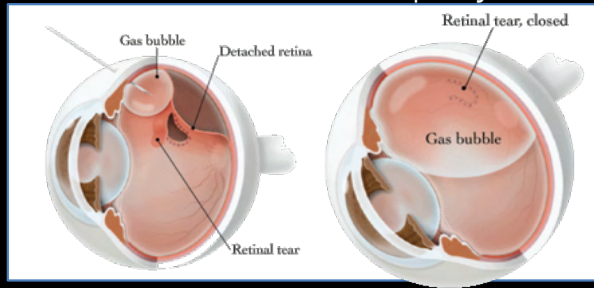


RRD Treatment

- Laser
- Pneumatic Retinopexy
 - In office gas bubble followed by HST treatment
- Vitrectomy
- Scleral Buckle, or Buckle/Vit



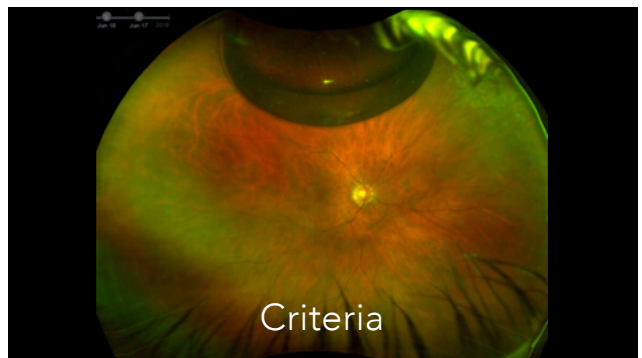
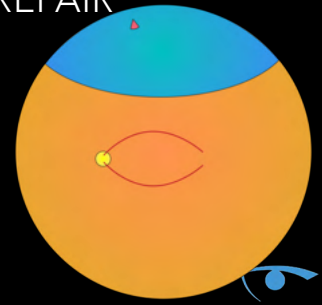
Pneumatic Retinopexy



RD REPAIR

PNEUMATIC RETINOPEXY

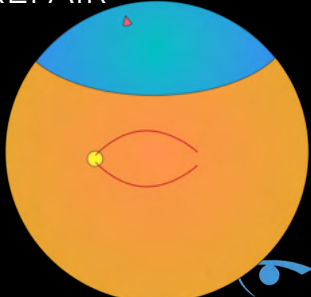
- SUPERIOR RETINA
- TEAR(S) LIMITED TO 1-2 CLOCK HOURS
- CLEAR VIEW
- NO OTHER PATHOLOGY (LATTICE, ETC)
- PHAKIC?
- LIMITED OR ACCESS?



RD REPAIR

PNEUMATIC RETINOPEXY

- IN OFFICE
- 5-10 MINUTES
- 70-80% SUCCESS
- 2-3 WEEKS (GAS)
- POSITIONING
- NEW OR MISSED TEARS
- TO THE OR...



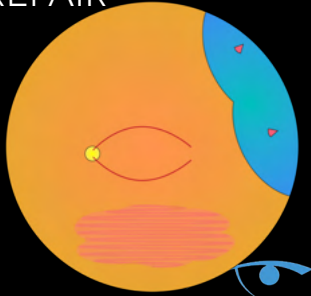
A schematic diagram of an eye cross-section. The vitreous cavity is filled with a blue gas bubble at the top. A yellow laser spot is shown on the retina, and a red line indicates a retinal tear. A small blue arrow points to the eye from the right.

Primary Vitrectomy

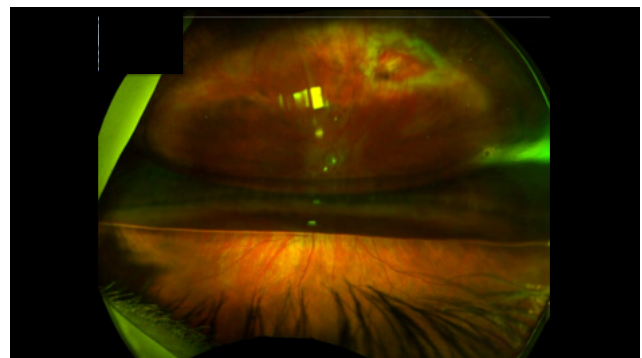
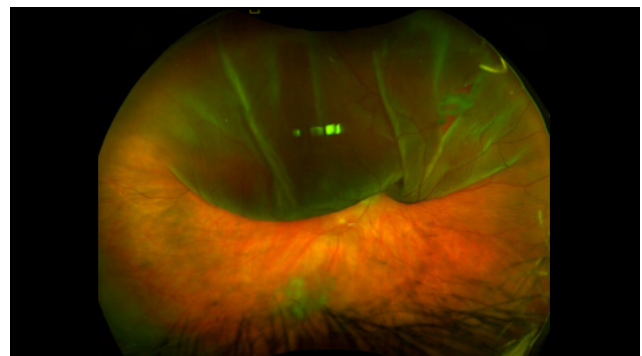
RD REPAIR

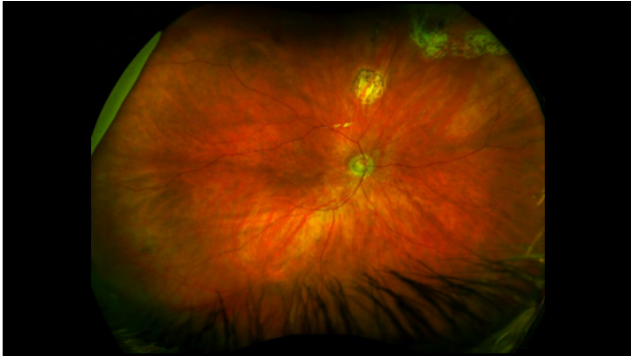
PRIMARY VITRECTOMY

- PSEUDOPHAKIC*
- MACULAR PATHOLOGY (ERM)
- VITREOUS HEMORRHAGE
- LIMITED INFERIOR PATHOLOGY
- LIMITED PVR
- THIN SCLERA?



A schematic diagram of an eye cross-section. The vitreous cavity is partially filled with a blue gas bubble on the right side. A yellow laser spot is shown on the retina, and a red line indicates a retinal tear. A small blue arrow points to the eye from the right.





RD REPAIR

PRIMARY VITRECTOMY

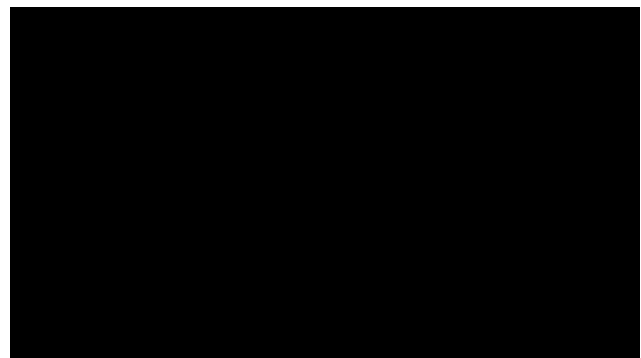
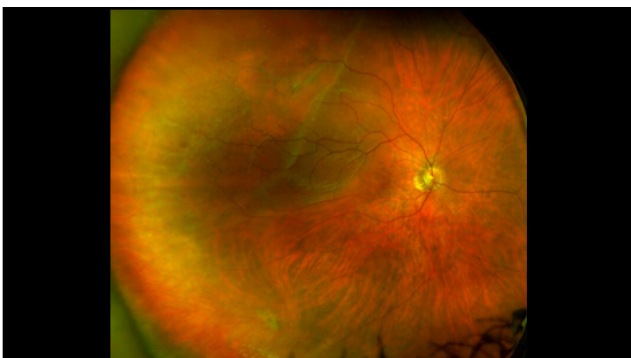
- OPERATING ROOM
- 30-60 MINUTES
- 80-90% SUCCESS
- 2-3 WEEKS (GAS)
- POSITIONING
- PVR
- BUCKLE VIT (+/- OIL)

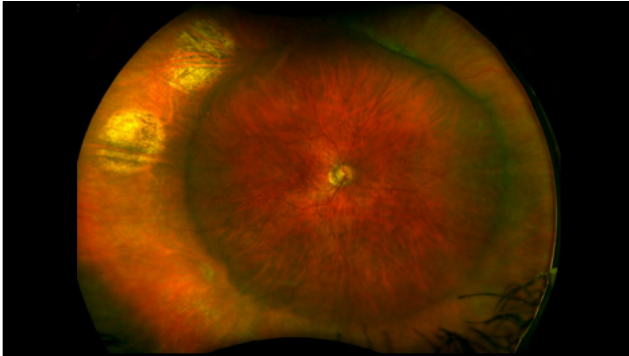
Primary Buckle

RD REPAIR

SCLERAL BUCKLE

- PHAKIC*
- INFERIOR RD
- YOUNG MYOPE WITH LATTICE
- INFERIOR PATHOLOGY
- LIMITED PVR (SUBRETINAL BANDS)
- THIN SCLERA?





RD REPAIR

SCLERAL BUCKLE

- OR
- 60-90 MINUTES
- 80-90%
- 2-3 WEEKS
- POSITION IF GAS USED
- PVR FORMATION
- VITRECTOMY

RD REPAIR

BUCKLE + VITRECTOMY

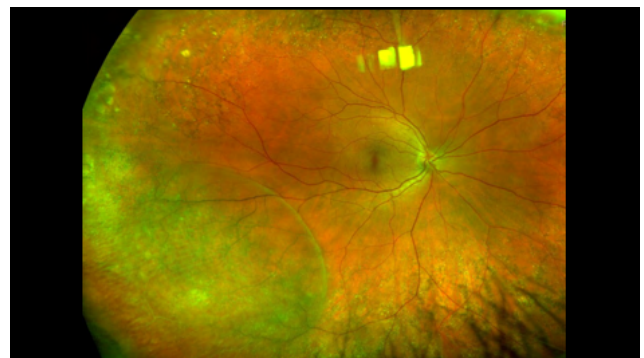
- OR
- 60-120 MINUTES
- 80-95%
- 3-4 WEEKS
- POSITIONING KEY
- RECURRENT RD (PVR)
- VITRECTOMY WITH OIL

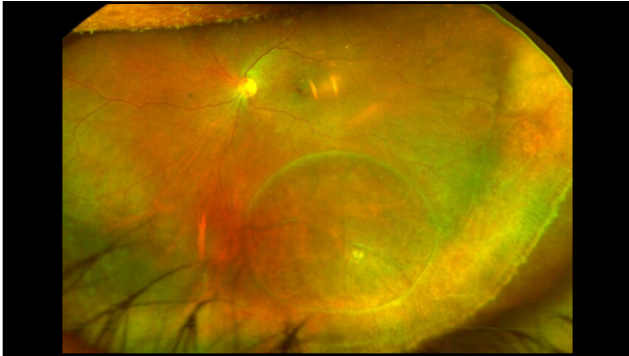
Look Alikes

- Retinoschisis
- Choroidal Detachment

Retinoschisis

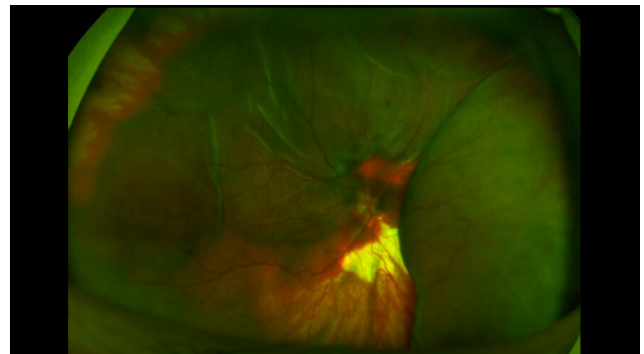
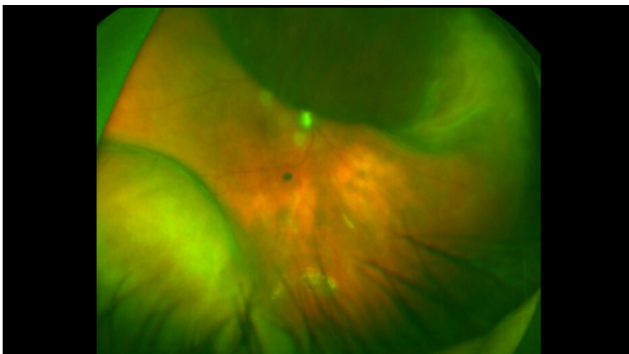
- Retinoschisis – is a splitting of the retinal layers
 - Age related – between INL and OPL
 - Juvenile – often central
- Typically not treated, doesn't threaten
- Distinguishing it from an RD





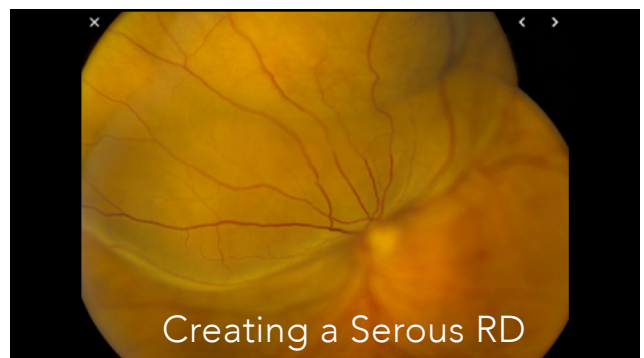
Choroidal Detachment

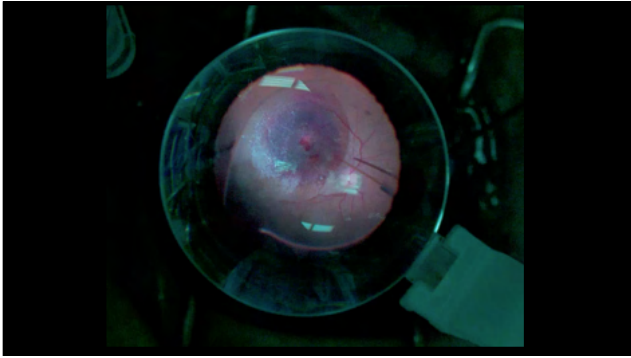
- Typically have a history of hypotony
 - Post glaucoma or cataract surgery
- Can get it primarily in high hyperopia
- Typically less urgency than RD



Serous RD

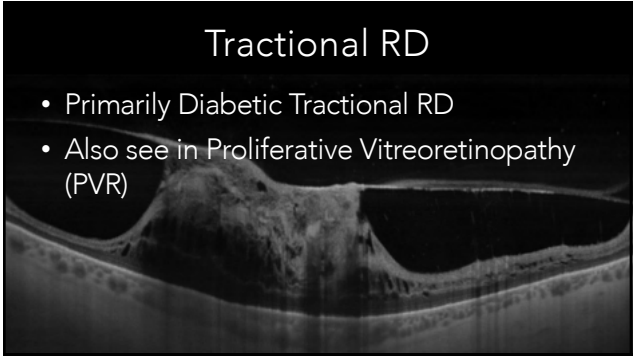
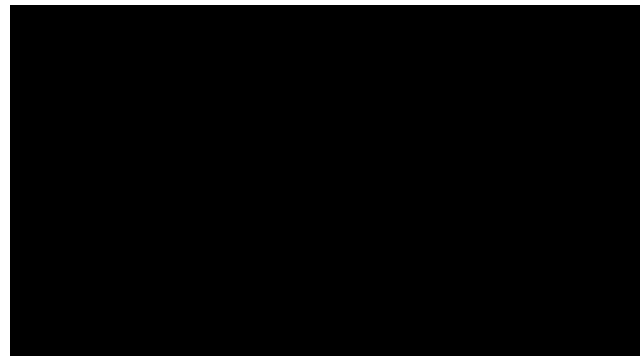
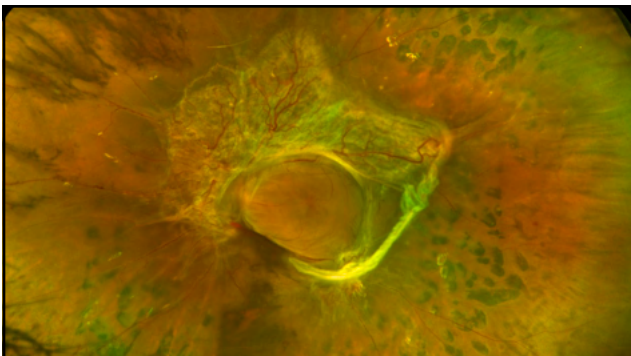
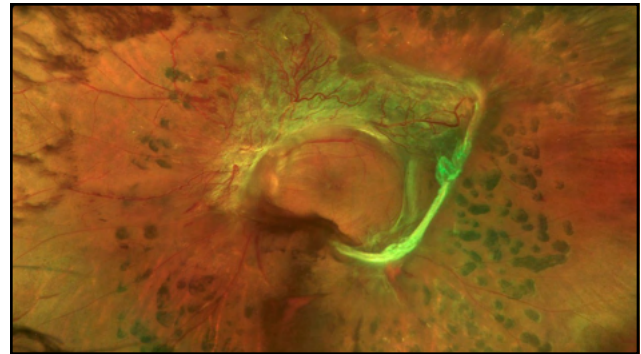
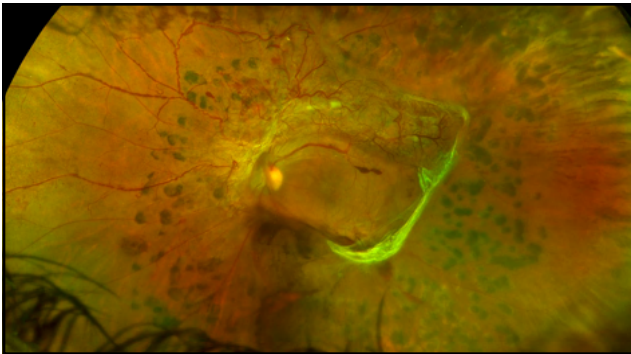
- Typically see with uveitis or tumor
- Appearance different
 - Smoother surface
 - Typically have pain
- Surgery doesn't help

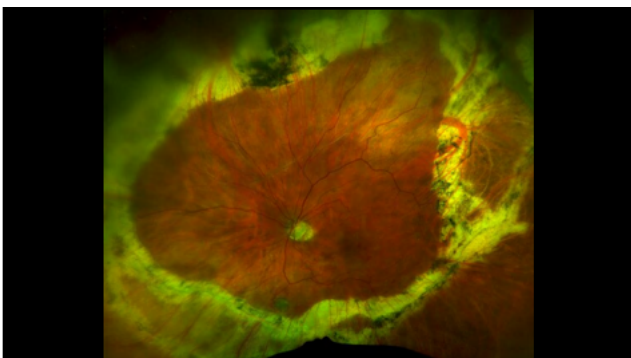
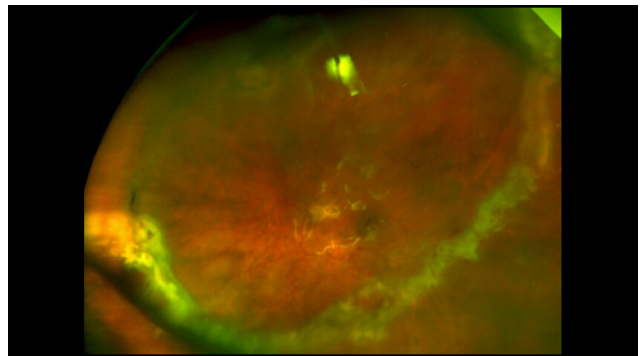
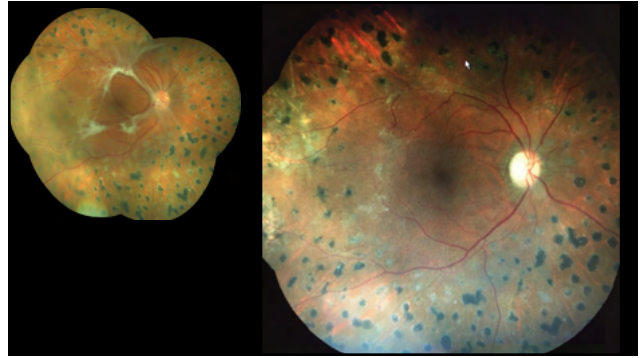
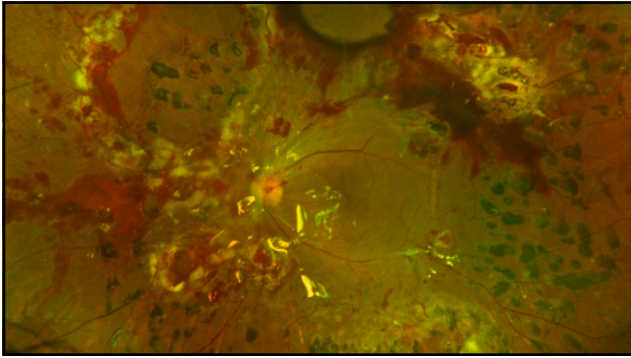




Tractional RD


- Primarily Diabetic Tractional RD
- Also see in Proliferative Vitreoretinopathy (PVR)

An OCT scan showing a tractional retinal detachment. The scan reveals a large, dark, irregularly shaped area of vitreous traction pulling on the retina, causing it to detach. The underlying retinal layers are visible, and the detachment is clearly demarcated from the normal retina.



GOALS

- SIMPLIFYING THE COMPLEXITIES
- DEVELOP A STRATEGY FOR EVALUATING THE PVD PATIENT
- UNDERSTAND THE IMPORTANCE OF MACULA STATUS IN TIMING OF REPAIR
- UNDERSTAND DIFFERENT SURGICAL APPROACHES TO RETINAL DETACHMENT REPAIR
- IDENTIFY FACTORS THAT INFLUENCE THE TYPE OF PROCEDURE RECOMMENDED



Thank
You



www.RetinaKY.com