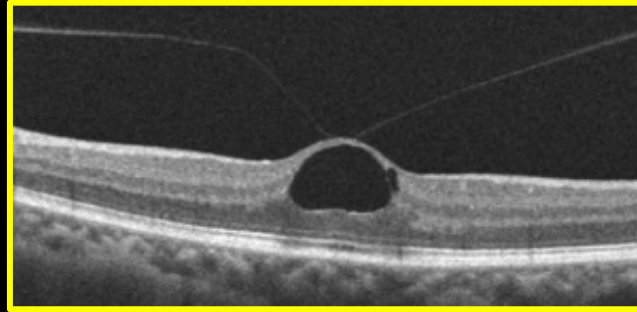


The Aborted Macular Hole

An Optical Coherence Tomography Study



Steven Agemy, MD

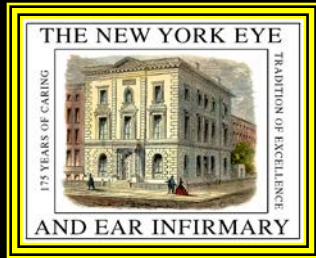
Jerome Giovinazzo, MD

Jessica Lee, MD

Thomas Muldoon, MD

Richard Rosen, MD

Ronald Gentile, MD



Commercial Relationship Disclosures

Steven Agemy, MD: None

Jerome Giovinazzo, MD: None

Jessica Lee, MD: None

Thomas Muldoon, MD: None

Richard Rosen, MD: Clarity (Consultant), OD-OS (Consultant),
Optovue (Consultant), Zeavision (Financial
support), Genentech (Financial support)

Ronald Gentile, MD: Alcon (Consultant)

Conflicts of interest:

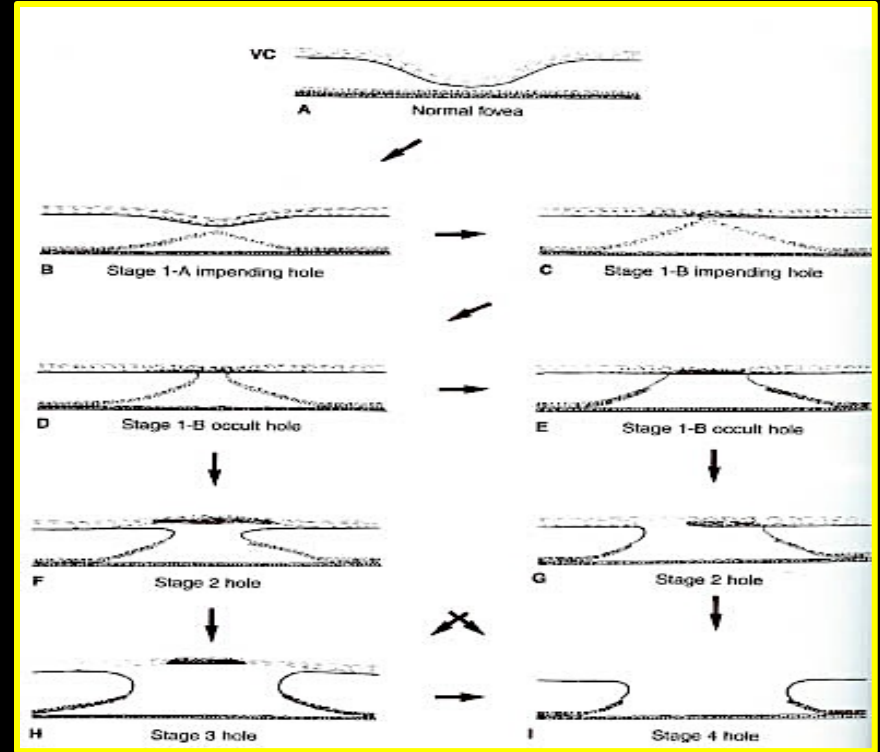
None regarding this presentation

Idiopathic Macular Holes

1988

■ *Johnson & Gass
Ophthalmology

■ ** Gass
Arch Ophthalmology



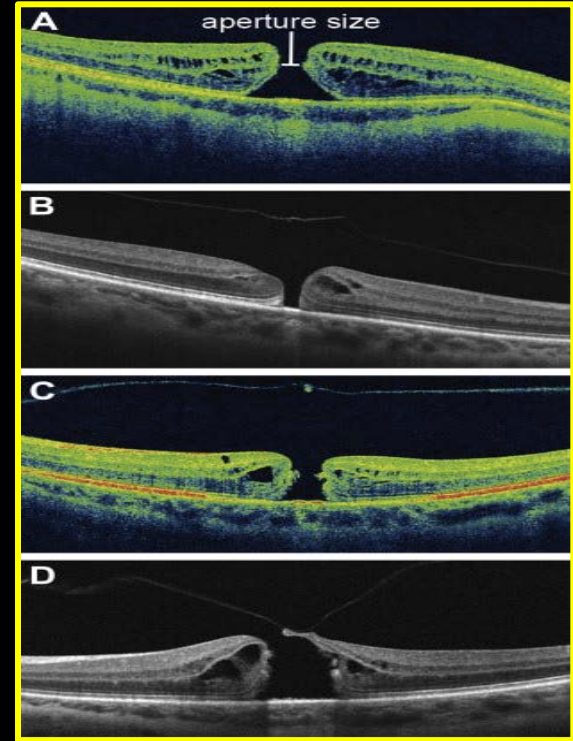
*Johnson RN, Gass JD: Idiopathic macular holes. Observations, stages of formation, and implications for surgical intervention. *Ophthalmology* 1988,95:917-924.

**Gass JD: Idiopathic senile macular hole. Its early stages and pathogenesis. *Arch Ophthalmol* 1988, 106:629-639.

Primary Macular Holes

2013

*International
Vitreomacular
Traction Study
Group



*Jay S. Duker, Peter K. Kaiser, Susanne Binder, Marc D. de Smet, Alain Gaudric, Elias Reichel, Srinivas R. Sadda, Jerry Sebag, Richard F. Spaide, Peter Stalmans. The International VMT Study Group classification of VMA, VMT, and MH. *Ophthalmology* 2013, 120:2611-19.

Impending Macular Hole

***VMT Study Group**

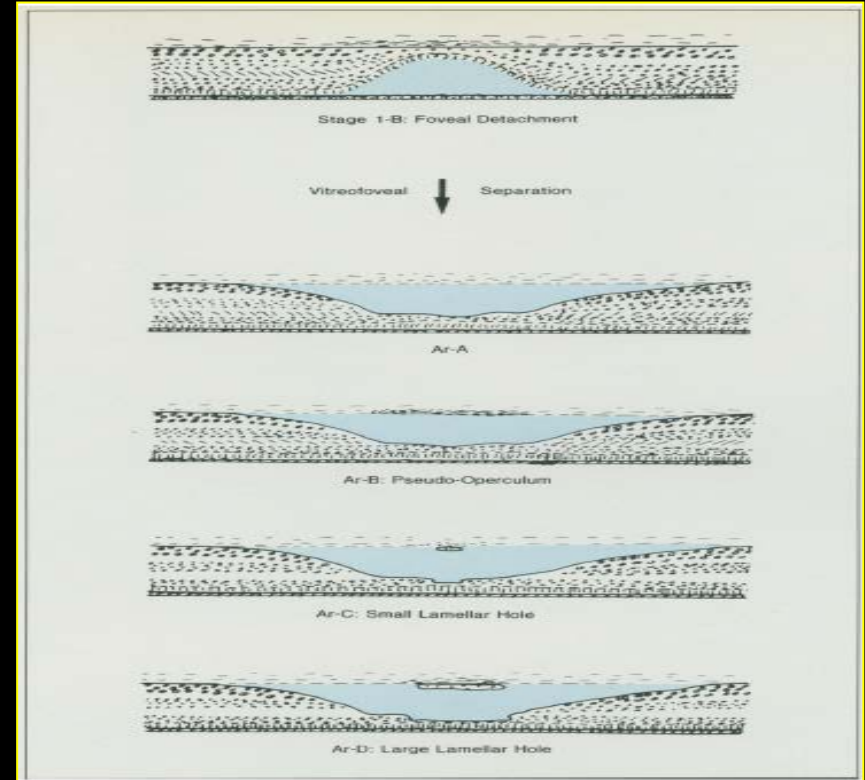
Primary Macular Hole in Fellow Eye



***Jay S. Duker, Peter K. Kaiser, Susanne Binder, Marc D. de Smet, Alain Gaudric, Elias Reichel, Srinivas R. Sadda, Jerry Sebag, Richard F. Spaide, Peter Stalmans. The International VMT Study Group classification of VMA, VMT, and MH. *Ophthalmology* 2013, 120:2611-19.**

Aborted Macular Hole

1988- Gass defined as Stage 1 MH that spontaneously resolves without progression to a full thickness hole



*Gass JD. Idiopathic senile macular hole. Its early stages and pathogenesis. Arch Ophthalmol. 1988;106:629-39.

Purpose

1. Describe OCT findings of aborted macular holes
2. Gain insight into pathogenesis of macular holes

Methods

- IRB approved retrospective study
- Criteria for diagnosis
 1. OCT confirmed aborted stage 1 MH (VMT)
 2. Evidence of an aborted macular hole based on history, fundus exam, OCT, and fellow eye findings

Methods

- OCT images were analyzed for
 1. Foveal Contour Abnormalities
 2. Presence/Absence of Opercula
 3. Pre or intra-retinal Abnormalities

Results

- 18 eyes (15 patients)
 - 7 OD, 5 OS, 3 OU
- 80% women (12/15)
- Criteria 1 and 2- 9 each (50%)
- Fellow eyes
 - 5 (46%) MH/repaired MH
 - 1 each (9%) lamellar hole, VMA, VMT
 - 3 (27%) normal

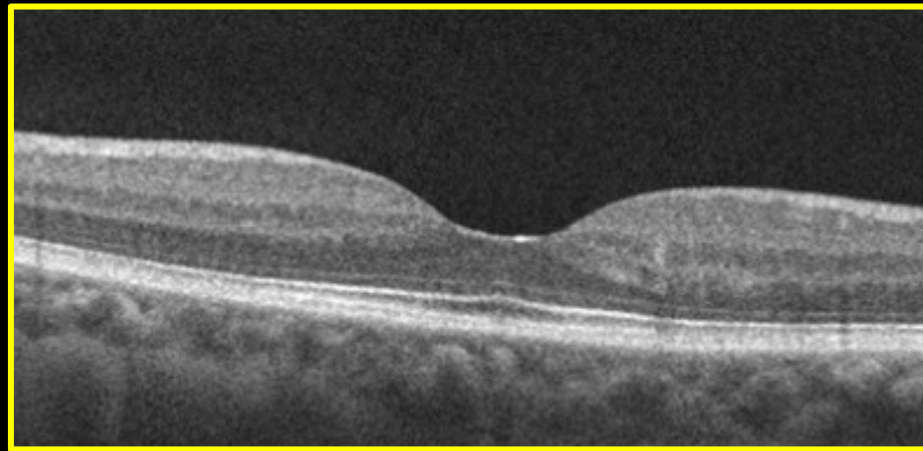
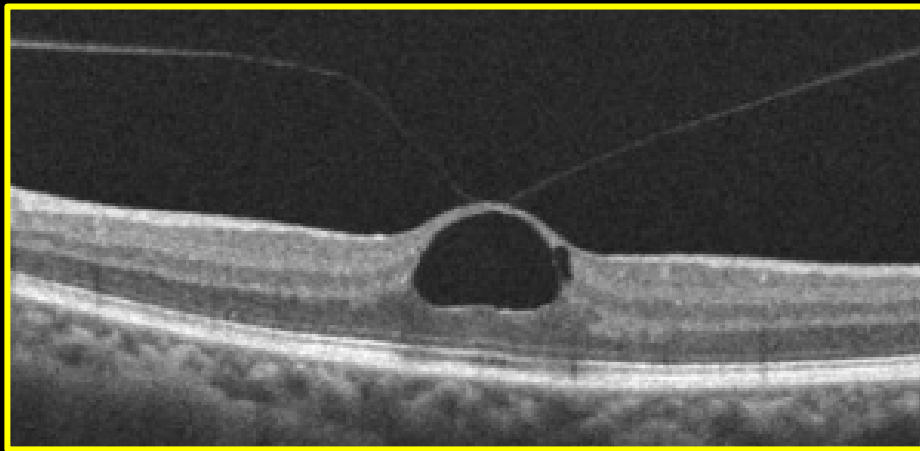
Results

- Thinning of the umbo (50%)
- Pre-foveal operculum (50%)
- Ellipsoid zone defect (17%)

- 4 Morphological Groups

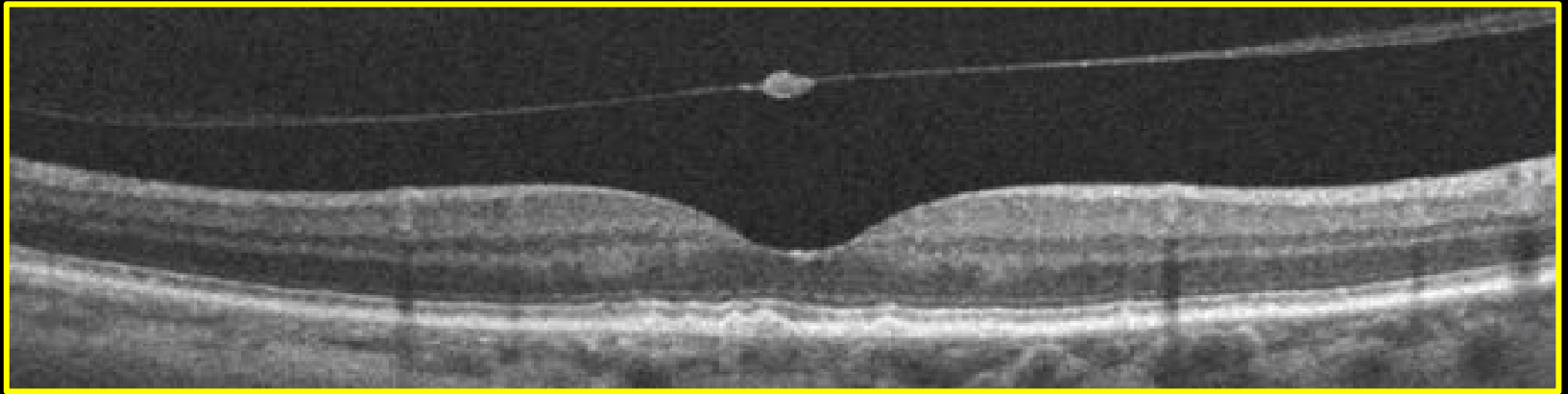
Group 1: Normal foveal contour

w/o operculum (22%)



2 months later

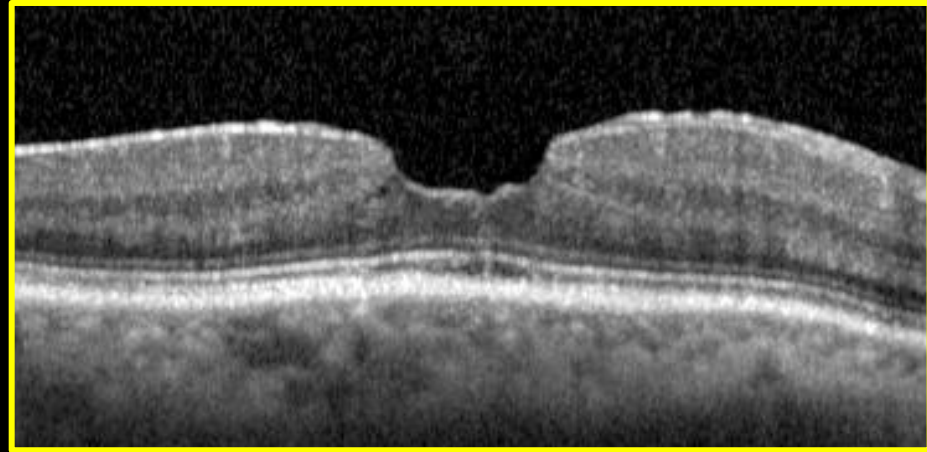
Group 2: Normal foveal contour with operculum (28%)



Fellow eye MH

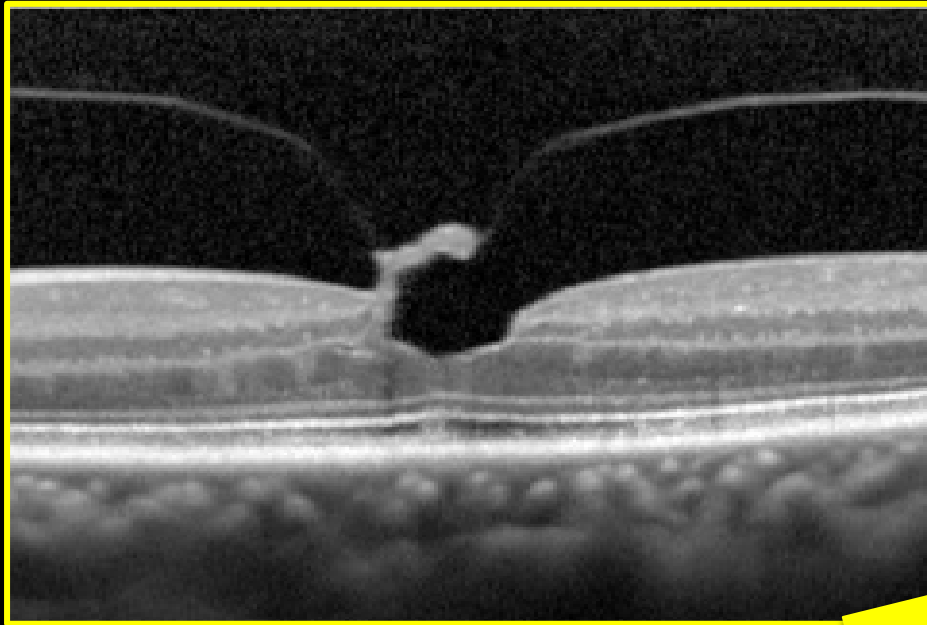
Group 3: Thinning of the umbo

w/o operculum (28%)

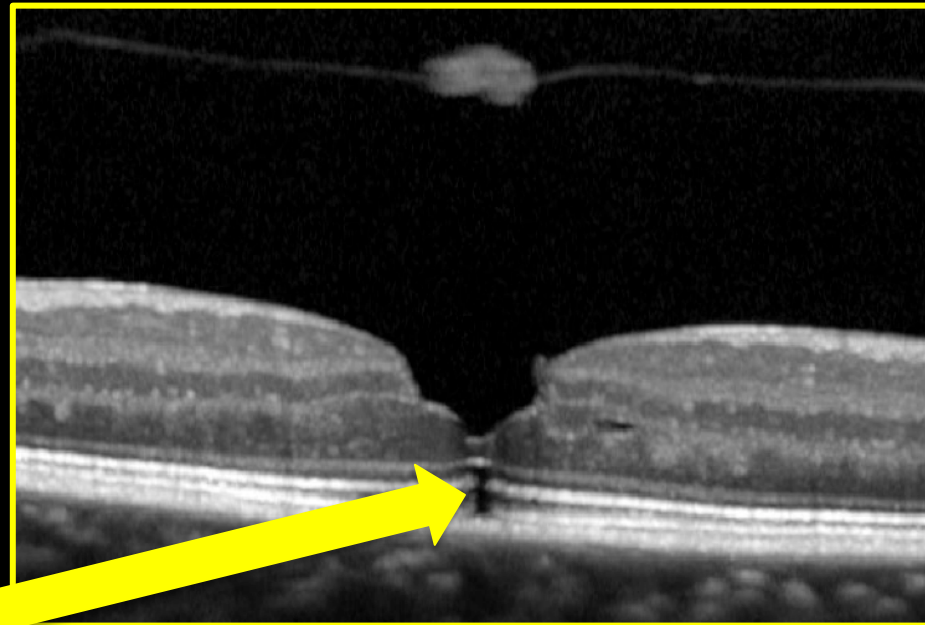


6 months later

Group 4: Thinning of the umbo with operculum (22%)



Ellipsoid zone defect



2 months later

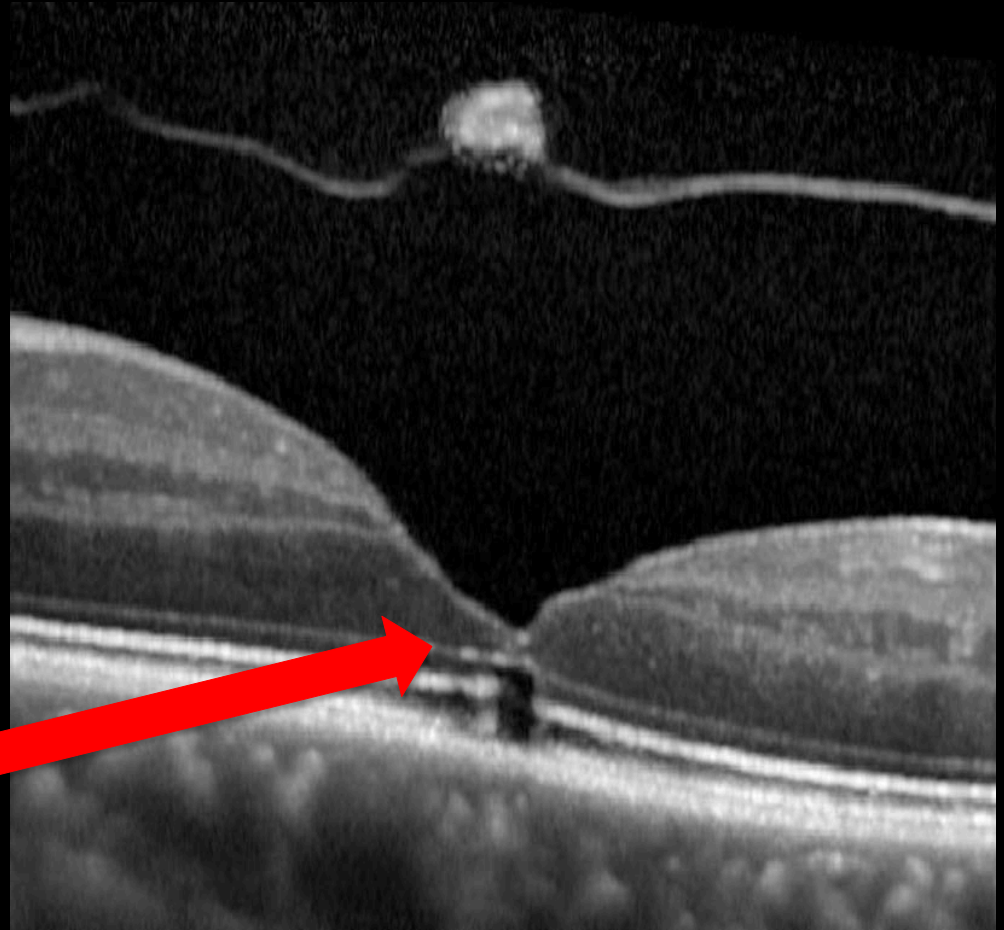
Summary

- OCT of Aborted Macular Holes range from:
 - Normal OCT
 - Marked inner/outer retinal layer defects with or without opercula

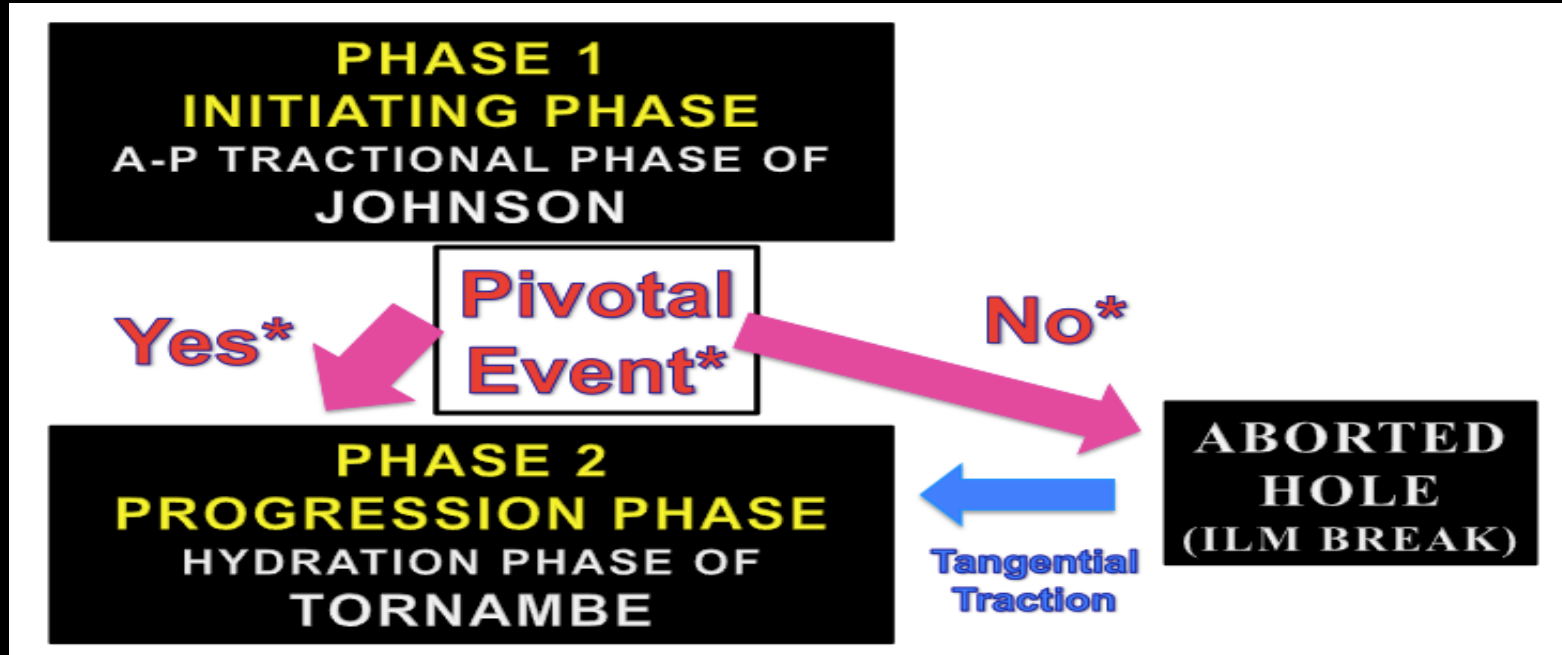
OCT: Aborted Macular Holes

**UNIFORM
FINDING**

Intact ELM



OCT: Aborted Macular Holes



PIVOTAL EVENT

Break in both the ILM and ELM

OCT: Aborted Macular Holes

THANK YOU FOR YOUR ATTENTION

