

- Q. Define Vitreous?
- Q. Give vitreal attachment?
- Q. Give age-related changes?
- Q. Function
- Q. Vitreous composition
- Q. causes of vitreous Hemorrhage

① -
✓

"Vitreous"

Q. Rx and complication

Definition:-

① → Transparent jelly-like structure that fills the posterior $\frac{4}{5}$ of eye-ball behind lens.

② → Volume is 4ml.

Attachment :

Ant → lens. (Hyaloid capsular ligament of Weiger) and ciliary epithelium in front of ora-serena

Post → optic disc, Macula lutea and Form ring-shape structure.

Age-Related changes :

At birth → Cloquet canal run from lens to optic disc → supply blood to lens in embryonic life.

Young → Vitreous gel is homogenous

Old → Vitreous liquifies

Function :

Form refractive medium of eye

Stablize the volume of Globe

Act pathway for nutrition to reach lens + Retina.

Vitreous Composition:

- ① → Water
- ② → Collagen like fiber →
 - Type II (90%)
 - Type IX (10%)
- ③ → Hyaluronic acid →
 - N-acetyl glucosamine
 - Glucuronic acid

Cause of Vitreous Hemorrhage

- | | | |
|------|---|--------------------------|
| T | • Trauma → Penetrating injury | } <u>Others</u>
STVCO |
| g | • Inflammation → Eales disease | |
| | Retinal vasculitis | |
| o | • Central vein thrombosis + Ocular ischemic syndrome | |
| v | • Vitreous Retraction | |
| c | • Coat's Disease | |
| DMR | • Diabetes Mellitus Retinopathy | } Retina-related causes |
| SCR | • Sickle cell Retinopathy | |
| HR | • Hypertensive Retinopathy | |
| RVO | • Retinal vein occlusion | |
| CRVT | • Retinoblastoma Melanoma | |
| RB | • Central-R-vein Thrombosis | |
| RV | • Retinal vasculitis | |

③ -

Rx:

Bed-Rest with elevated head

Photocoagulation ✓

Vitrectomy ✓ BPVA

Anti VEGF agents ✓

Complication:

① Hemorrhage

② Cystoid Maculopathy

③ Retinal break.