

## Unit 17:

# Eye, orbit, orbital region and eyeball

### GENERAL OBJECTIVES:

- general considerations of the organization of various structures in the orbit
- principles of the organization of the eyeball
- structure and function of supporting apparatus of the eyeball
- irrigation and innervations of the orbit (walls and content)

### SPECIFIC OBJECTIVES:

#### 1. Orbital Cavity

Walls: *Medial, Lateral, Apex & Base* (Orbital Margin)

Contents:

Orbital Periosteum, Orbital Fat.

Fascial Sheath of Eyeball -> Check Ligaments, Suspensory Ligament

**Eyeball: (Fibrous & Vascular Coats)**

**(Retinal Coat, Refractive Media)**

Muscles: *Levator Palpebrae Superioris*

*4 Rectus Muscles: Sup., Inf., Med., Lat.*

*2 Oblique Muscles: Superior, Inferior*

Attachments, Common Tendinous Ring of Origin of Recti

*Actions*

Nerves: *II (Optic Nerve) -> Optic Disc on Retina*

*III (Superior & Inferior Divisions), IV, VI*

*V (Ophthalmic Division):*

*Lacrimal*

*Frontal (& Branches)*

*Nasociliary*

*Branches*

Ciliary Ganglion (Parasympathetic) -> Short Ciliary Nerves

Sympathetics (Plexus along Ophthalmic Artery)

Arteries: *Ophthalmic*

Branches: *Central Artery of Retina*

*Others*

Veins: *Ophthalmic - Superior & Inferior, Central Retinal*

*Lacrimal Gland - Deep (Orbital) Lobe*

#### 2. Eyelids and Lacrimal Apparatus

Eyelids: *Tarsal Plates (Upper & Lower) Palpebral ligs. (Med. & Lat)*

*Orbital Septum (Palpebral Fascia)*

Muscles: *Lev. Palp. Superioris -> Superior Tarsal Muscle*

*Orbicularis Oculi (Palpebral Part)*

Lacrimal Apparatus:

*Lacrimal Gland & Ductules, Conjunctiva*

*Lacrimal Canaliculi, Sac, Nasolacrimal Duct*