

Ocular Urgency and Emergency Diagnosis & Treatment
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A. **Description:** Cases of current methods of treating ocular emergencies. Includes the ocular adnexa and lacrimal system, mechanical and infectious involvement of the anterior segment, urgent glaucomas, diabetic retinopathy, hypertensive retinopathy, CRVO, CRAO and macular hole.

B. **Objectives:**

1. Display ability to identify pertinent historical information relating to ocular urgencies and emergencies.
2. Be able to identify the major classes of ocular pharmaceuticals that are necessary in the management of ocular urgencies and emergencies.
3. To have the ability to use the basic clinical instrumentation needed to assess the ocular emergency patient.
4. Awareness of common laboratory tests used to diagnose the ocular emergency patient.
5. Recognition of the most commonly encountered ocular emergencies involving the ocular adnexa.
6. Recognition of the most commonly encountered ocular emergencies involving the anterior segment structures.
7. Recognition of the most commonly encountered ocular emergencies involving the posterior segment structures.

C. **Outline**

I. Medications

1. Anti-infectious agents
 - a. Case presentations of when topical or oral preparations are indicated to treat infection involving a structure of the anterior segment
 1. Categories of topical or oral antibiotics and their mechanism of action.
 - a. Tetracyclines
 - b. Macrolides
 - c. Penicillins
 - d. Cephalosporins
 - e. Fluoroquinolones
 - f. Sulfonamides
 2. Indications for use of oral antibiotics
 - a. Dosages and details of medications
 3. Contraindications that should be considered when selecting topical or oral antibiotics.
 - b. Recognition of both ocular and systemic side-effects
 2. Antiviral medications
 - a. Mechanism of action
 - b. Indication for use
 - c. Limitations in use
 - d. Considerations of co-management
 3. Antifungal medications
 - a. Mechanism of action

- b. Indications for use
- c. Limitations in use
- d. Considerations of co-management
- 4. Steroids
 - a. Case of anterior and posterior segment inflammation that warrants the use of oral preparations.
 - b. Available corticosteroids
 - c. Mechanism of action of corticosteroids
 - d. Indications for use of oral corticosteroids
 - e. Dosages and details of the most common use for ocular diseases
 - f. Contraindications that should be considered
 - 1. Considerations of co-management with other providers
- 5. Nonsteroidal anti-inflammatory drugs (NSAIDs) and the role of topical and oral preparations in the management of ocular pain.
 - a. Case of anterior segment inflammation and pain
 - 1. Available NSAIDs
 - a. Over-the-counter
 - b. Prescription strength
 - 2. Mechanism of action of NSAIDs
 - 3. Indications for use of oral NSAIDs
 - a. Dosages and details of the most common use for ocular diseases
 - 4. Contraindications that should be considered
 - a. Considerations of co-management with other providers
 - b. Recent reports of systemic side-effects of NSAIDs
- 6. Analgesic agents
 - a. Case of anterior segment pain management using topical and oral preparations
 - 1. Available analgesics
 - a. Over-the-counter
 - b. Prescription strength
 - 1. Non-narcotic
 - 2. Narcotic
 - 2. Mechanism of action of analgesics
 - 3. Indications for use of oral analgesics
 - a. Dosages and details of the most common use for ocular diseases
 - 4. Contraindications that should be considered
 - a. Considerations of co-management with other providers
 - b. Consideration of patient profile
 - c. Protection from abuse of services

II. Case Presentations

- 1. Introduction to emergencies
 - a. Methodology and examination
 - b. The arsenal of medications and prescription writing review.
 - c. The arsenal of laboratory studies.
 - d. Ordering laboratory and imaging studies.
 - e. Correspondence
- 2. Anterior segment

- a. Eye lid / conjunctival laceration.
 - b. Dacryocystitis.
 - c. Preseptal cellulitis.
 - d. Subconjunctival hemorrhage.
 - e. Episcleritis / scleritis.
3. Cornea / uvea
- a. Corneal abrasion.
 - b. Corneal foreign body.
 - c. Contact lens associated acute red eye.
 - d. Corneal burns
 - 1) Thermal.
 - 2) Chemical.
 - 3) Photochemical.
 - e. Ulceration
 - 1) Bacterial.
 - 2) Viral.
 - 3) Sterile.
 - 4) Keratolysis.
- f. Uveitis
- g. Hyphema.
- 1) Blunt trauma.
 - a) Ruptured globe.
 - b) Blow out fracture.
 - c) Retrobulbar hemorrhage.
 - 2) Late glaucoma
4. Glaucoma
- a. Pupil block and its variations (plateau iris, vitreous pupil block, etc..).
 - b. Neovascular glaucoma.
 - c. Posner – Schlossman syndrome.
 - d. Uveitic glaucoma.
5. Posterior segment
- a. Diabetic retinopathy (PDR, CSME)
 - b. Retinal vein occlusion (Management and understanding the underlying cause).
 - c. Retinal artery occlusion and intraretinal emboli.
 - d. AMD (SRNVM).
 - e. PVD, retinal detachment and macular hole.
6. Neuroophthalmology
- a. Disc edema.
 - 1) ION.
 - a) AAION.
 - b) NAAION.
 - c) PION.
 - 2) PTC.
 - 3) ON.
 - 4) Grade IV HR.
 - 5) Neuroretinitis.

- b. CN III p.
- c. CN IV p.
- d. CN VI p.
- e. CN VII p.
- f. CS fistula and other causes of proptosis and ptosis.