

Common Ophthalmological Conditions in PHC

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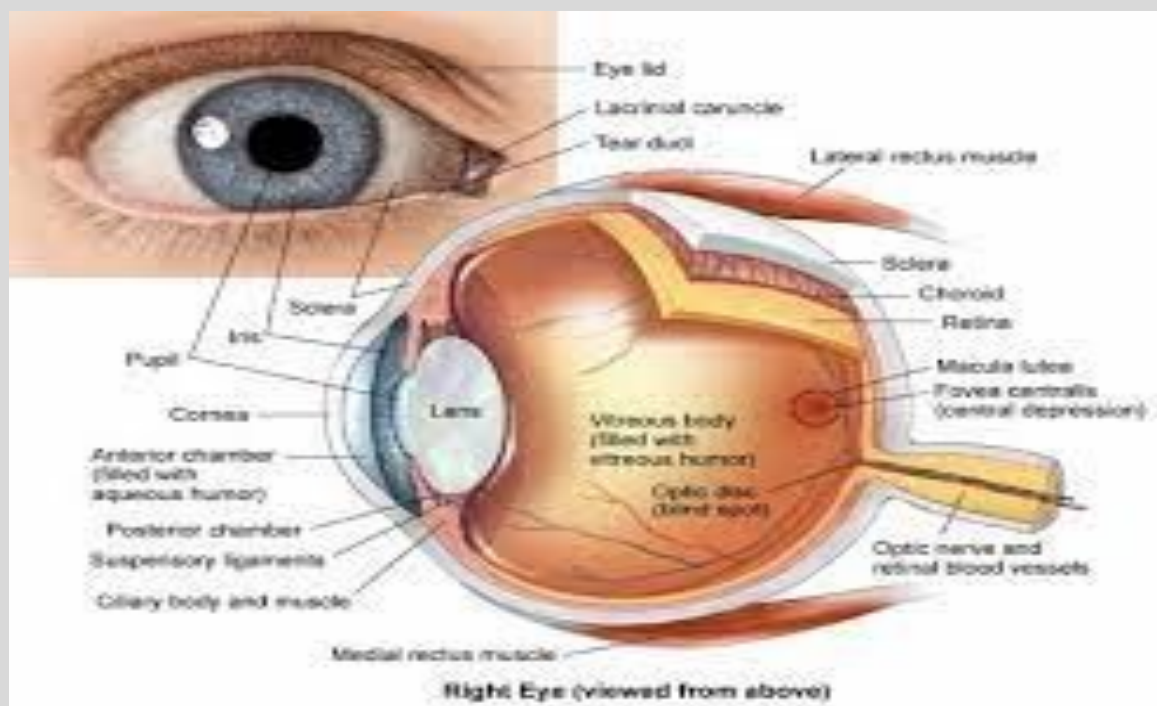


Table of content

1. Acute red eye
2. Sudden loss of vision
3. Cataracts
4. Chalazion
5. Stye

Acute Red Eye

Causes:

Conjunctivitis

Keratitis

Uveitis

Episcleritis

Scleritis

Acute angle closure glaucoma

Subconjunctival haemorrhage

Signs and symptoms ,help in differentiating between causes:

- Pain/irritation
- Discharge
- Type
- Photophobia
- Visual loss
- Severity
- Pupil changes
- Distribution of redness
- Diffuse or localised Cilliary flush

1. Conjunctivitis

- Inflammation of the conjunctiva
- Usually bilateral
- Variable pain/irritation
- Diffuse redness
- Discharge common:
 1. Watery
 2. Muroid
 3. Purulent/mucopurulent



Normal Eye



Bacterial Conjunctivitis



Viral Conjunctivitis



Allergic conjunctivitis

1.1 Allergic Conjunctivitis

- The Patient can present with :
 1. Itchy watery eyes
 2. Slightly re or normal conjunctiva
 3. Conjunctival swelling
 4. Mucoïd discharge
 5. Palpebral follicles /papillae
- Treat with :

adults and children >6 years

Oxymetazoline eye drops

Sodium chromoglycate

If unresponsive to eye drops you can add an oral antihistamine , allergex/ cetirizine

(Opticrom) drops or steroid drops if very severe .The severe /chronic forms of allergic conjunctivitis are vernal /spring catarrh



1.2 Viral Conjunctivitis

- **The patient can present with the following :**
 1. Painful eyes /itchy/burning
 2. Photophobia
 3. Profuse watery discharge, if theres a yellow discharge this indicates that there may be a secondary bacterial infection
 4. Diffuse pink / red conjunctivae'
 5. Preauricular lymphadenopathy
 6. +/- keratitis
 7. Tarsal follicles
- **Common causes are**
 1. Adenovirus
 2. Herpes simplex virus
- **Treatment**

Advise on correct cleansing or rinsing of eyes with clean water

Cold compresses for symptomatic relief

Treat with Acyclovir

Treat with oxymetazoline eye drops and analgesia



1.3 Bacterial Conjunctivitis

The patient can present with :

1. Mucopurulent discharge
2. Sore gritty / scratchy eyes
3. Swollen eyelids
4. Redness of the conjunctival angles /fornices

- **Common causes :**

1. Staphylococcus epidermidis
2. Staphylococcus aureus
3. Haemophilus influenzae
4. Streptococcus spp
5. Pseudomonas aeruginosa
6. Neisseria gonorrhoea

Treatment :

- Educate patient on personal hygiene to avoid spread
 - Discourage use of contaminated cosmetics
 - Promote good contact lens hygiene
 - Avoid chronic use of topical medications
 - Advise patient never to use urine /milk in the eyes

-chloramphenicol 1% ophthal ointment and analgesia

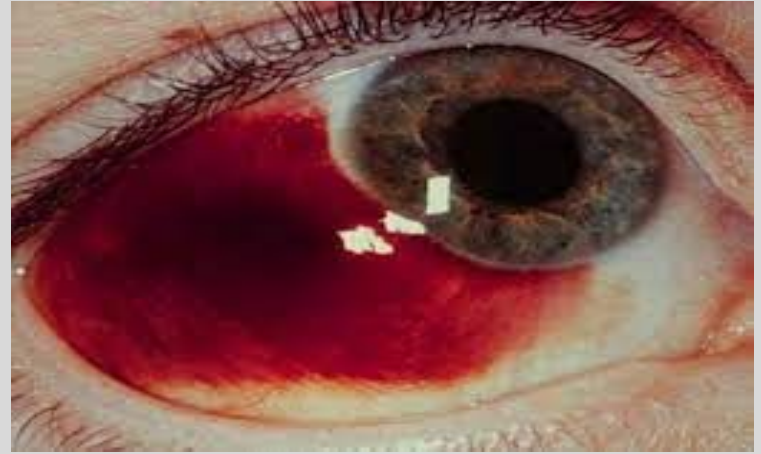
- for N gonorrhoea ceftriazone IMI Stat



1.4. Subconjunctival Haemorrhage

- Spontaneous in elderly
- Trauma history
- Remains bright red for several days

Referral to the eye clinic is advised.



2.Sudden loss of vision

1. Retinal conditions
2. Vitreous conditions
3. Choroidal conditions
4. Optic nerve or visual pathways conditions

Eye often looks normal from the outside

NB check pupil reactions

Referral to St Johns is advised

1. Retinal Causes

Vascular occlusions (artery /vein):

Arterial : The patient can present with sudden visual loss +/- history of amaurosis fugax(arterial)

Causes :

- Emboli
- Carotid artery occlusion
- Massive haemorrhage
- Heart failure
- Temporal Arteritis

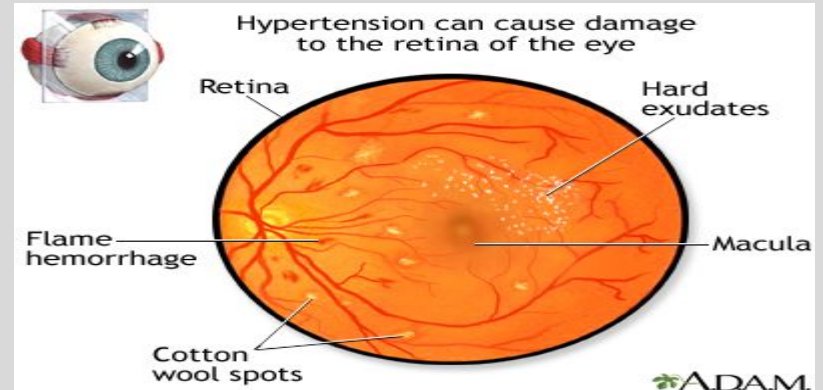
Venous :The patient can present with sudden vision loss but not quite as severe as arterial occlusion

Causes :

- Hypertension
- Diabetes
- Blood dyscrasia
- Glaucoma

Hypertensive retinal changes

- Grade 1:mild generalised retinal arteriolar narrowing
- Grade 2: definite focal narrowing and av nipping
- Grade 3: signs of grade 2 + retinal haemorrhages , exudates and cotton wool spots
- Grade 4 : Severe grade 3 retinopathy + papilloedema



Diabetic retinal changes

I. **Non-proliferative (background) retinopathy**

- Simple background retinopathy
- Dot and blot haemorrhages
- Hard exudates
- Micro-aneurysms
- Macular edema

II. **Pre-proliferative retinopathy**

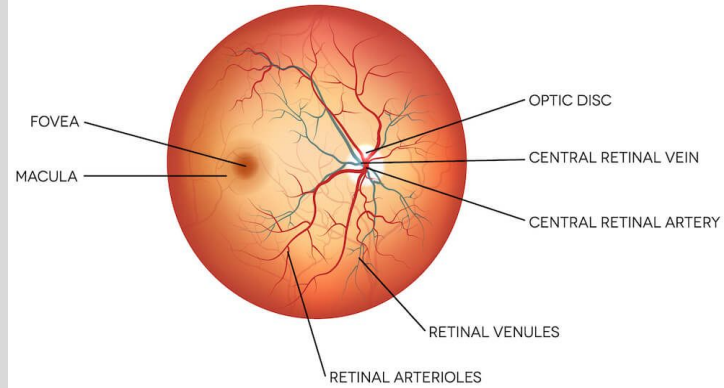
- Soft exudates
- Intraretinal microvascular abnormalities

Diabetic retinal changes continued

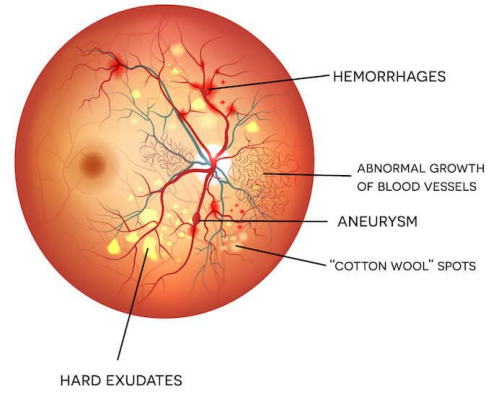
II. Proliferative

- Neovascularization of the disc
- Neovascularization elsewhere in the disc
- Fibrovascular proliferation
- Vitreous haemorrhage

NORMAL RETINA



DIABETIC RETINOPATHY



Papilloedema

Defined as swelling of the optic disc due to raised intracranial pressure(more than 200mmH₂O)

Most commonly bilateral but can be unilateral

Symptoms: Visual loss is rare and present is limited to a few seconds

Minor visual disturbances at first

Later – blind spot enlargement

Loss of peripheral field vision

Signs: Mechanical vs Vascular

Mechanical:

1. Elevation of the nerve
2. Loss of the cup
3. Margin of the disc becomes obscured
4. Retinal folds
5. Hard exudates



Papilloedema continued

Vascular:

1. Hyperaemia of the disc
2. Engorgement and tortuosity of the veins
3. Cotton wool spots
4. Haemorrhages around the disc
5. Loss of the vessels as they cross the disc

Causes :

1. Intracranial space occupying lesions
2. Tumours
3. Granulomas
4. Cysts
5. Hydrocephalus in adults
6. Meningitis

Papilloedema continued

7.Venous obstruction

8.Venous sinus thrombosis

9.Benign/idiopathic

10.intracranial hypertension

(BIH/IIH)

Foreign body in the eye

Many foreign objects that enter the eye are a result of mishaps that occur during everyday activities e.g. eyelashes, dust, dirt, sand

Foreign bodies that enter the eye at high rate of speed pose the highest risk of injury e.g. welding, grinding or hammering metal without wearing protective eye gear.

Symptoms:

- Disturbed vision
- Complaints of FB in the eye which may not be visible
- Pain and lacrimation
- Metallic FB embedded in cornea may appear as a cloudy spot with a dark speck in the centre.

Treatment:

General measures:

- If FB is not embedded, irrigate eye with clean water/ sodium chloride 0.9%
- Remove any visible FB on sclera/conjunctiva with a moist cotton bud
- Consider Xray of orbit to exclude intra-ocular metallic FB
- Can consider use of local anaesthetic prior to removal of FB (Tetracaine 1% eye drops)

When to refer:

1. Embedded/ penetrating FB
2. Failure to remove/ suspected intra-ocular FB

Cataracts

Defined as clouding of the lens, mostly related to age

Causes: Secondary(after surgery or with other health pr

Traumatic

Congenital

Radiation

Risk factors: Diabetes

Eye surgery

Prolonged corticosteroid use

Smoking and alcohol

Prolonged exposure to the sun



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Cataracts continued

Symptoms

1. Cloudy or blurred vision
2. Faded colours
3. Glare from headlights or lamps
4. Poor night vision
5. Double vision

Diagnoses

Visual acuity test

Dilated eye exam

Tonometry

Management: referral to eye clinic

Chalazion

Defined as a slow growing, inflammatory lump that forms due to blockage and swelling of an oil gland in the eyelid. It is generally not an infection, starts out as a very small, red, non-tender, swollen area of the eyelid,

Characteristics:

1. Painless bump
2. Tearing and mild irritation
3. Blurred vision

Management

Usually requires little to no medical treatment



Stye or hordeolum

Defined as a small, painful lump inside or outside the eyelid. It is actually an abscess filled with pus commonly caused by a bacterial infection.

Symptoms: red, hot, tender swelling near the edge of the eyelid

Treatment: Usually heals within a few days without medical treatment

1. Home remedies
2. Antibiotic to reduce bacterial growth I.E Sulfacetamide eye ointment apply 3-4hourly



THANK YOU