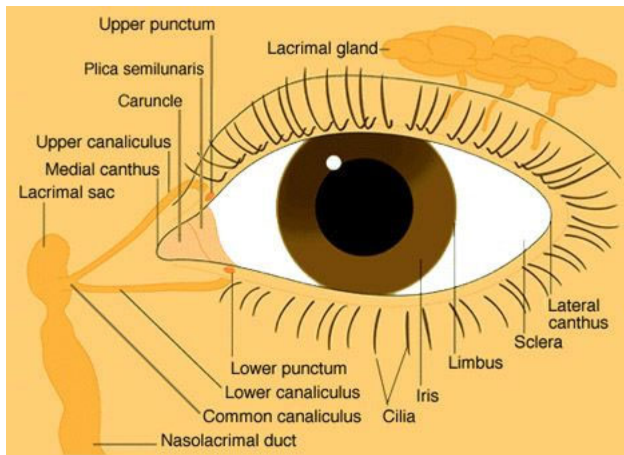
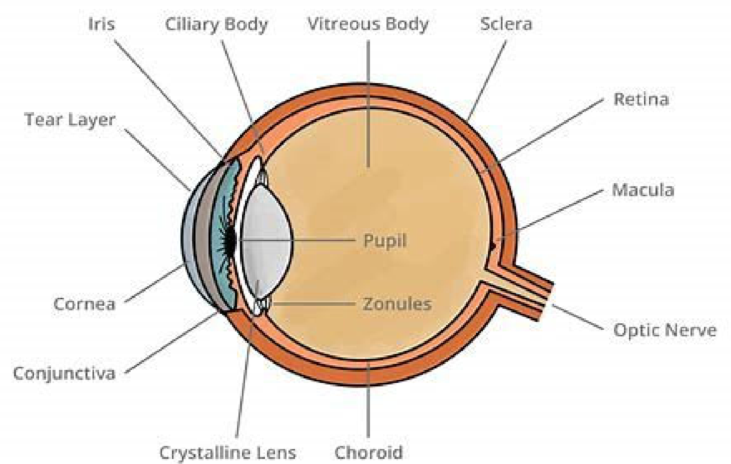
THE ROYAL VICTORIA
EYE AND EAR
HOSPITAL DVBLIN

GP Common Eye Condition Booklet

March 2023

Anatomy of the Eye





General Information

Equipment and drugs to keep at hand in the surgery:

- Vision testing chart
- Good light source with magnifier (and ideally blue light source)
- Fluorescein 1% drops
- Chloramphenicol ointment 1%
- Cotton buds, Eye pads & Tape
- Direct ophthalmoscope
- Patient information leaflets

General Good Practice Advice

- Review patient history, noting allergies, medical and ocular history,, including **amblyopia** (weak eye or lazy eye since childhood)
- Always establish and record symptoms and onset (sudden/gradual/all/part/ pain)
- Refer red eye with vision loss or other signs of concern to an ophthalmologist for evaluation

Eye Examination

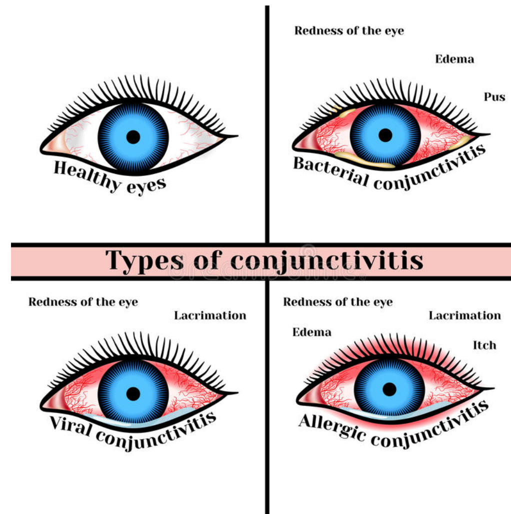
- It is good practice to check visual acuity for patients presenting with an eye condition
- Check the visual acuity in each eye separately for distance; if the patient wears distance glasses, these should be worn for the test
- Record best corrected visual acuity – that is, wearing glasses or contact lenses where used
- If vision is reduced, recheck with the patient looking through a pinhole viewer, which improves the vision if there is any uncorrected need for glasses/lenses
- Significant reduction in the visual acuity is a good indicator for referral

- Wash hands
- Observe lid margins, conjunctiva and cornea with white light   Instil 1 drop of fluorescein 1%.
- Observe for corneal staining (preferably using a blue light source)
- Diagnosis confirmed
- Treat accordingly
- If concerned, seek advice from an ophthalmologist

Care Pathways for Common Eye Conditions

Conjunctivitis

Conjunctivitis can be bacterial, viral or allergic



Symptoms

- Gritty/itchy/foreign body sensation
- Bacterial conjunctivitis often has mucopurulent discharge/lashes stuck together
- Viral often watery, associated with cold/sore throat, pre-auricular lymph nodes
- Blurring of vision due to disturbance of the tear film/corneal involvement (adenoviral)
- Seasonal/hayfever allergic conjunctivitis

Signs

- Redness affects all conjunctiva (globe of eye and tarsal conjunctiva lining inside of eyelids) in contrast to uveitis or scleritis where redness only on the globe
- Purulent discharge suggests bacterial origin
- Small white corneal infiltrates can occur in viral infection

Eye Examination

Instill 1 drop of fluorescein 1%

- Look for multiple fine white spots or fluorescein stains on cornea; major corneal staining or clouding suggests an alternative diagnosis e.g. corneal ulcer, especially in contact lens wearers

Treatment

- Chloramphenicol eye drops four times daily for bacterial conjunctivitis
- Topical single dose lubricants for viral conjunctivitis
- Hygiene (wash hands after touching eyes, use separate towel than others at home etc.)
- Topical steroids for corneal infiltrates should be prescribed by an ophthalmologist
- Antihistamine or antimast cell drops (e.g. cromoglycate, nedocromil, opatanol) are used for allergy

Dry Eyes

Dry eye syndrome is a condition where the eyes do not make enough tears, or the tears evaporate too quickly. This can lead to the eyes drying out and becoming inflamed. It is a common condition and becomes more common with age, especially in women. Up to a third of people aged 65 or older may have dry eye syndrome. It is more common in those with connective tissue disorders, in blepharitis and for contact lens wearers.

Symptoms

- Dry, gritty, discomfort or tired eyes which get worse throughout the day
- Mildly sensitive to light (not significant photophobia)
- Slight blurred vision, which improves on blinking
- Both eyes are usually affected (may be asymmetrical symptoms)

Signs

- Redness of the eyes
- Spotty ("punctate") fluorescein staining
- May be associated blepharitis (crusting of lashes, foamy tear film)

Eye Examination

- Observe lids, conjunctiva and cornea with white light
- Instil 1 drop of proxymethacaine 0.5% with fluorescein 0.25%
- Observe for corneal staining preferably using a blue light
- Consider Schirmer tear test (wetting of tear test strip in five minutes, <5–7mm abnormal)

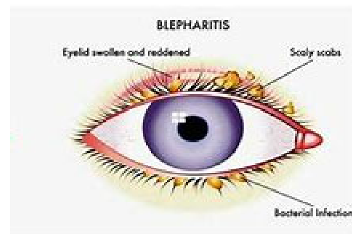
Treatment

- Tear substitutes: mild to moderate cases of dry eye syndrome can usually be successfully treated using over-the-counter artificial tear drops; if a patient has severe symptoms and needs to use eye drops more than six times a day, or if they wear contact lenses, advise them to use preservative-free eye drops
- Eye ointment can also be used to help lubricate eyes, but it can often cause blurred vision, so it is probably best used only at night
- More severe cases may require specialist medication or lacrimal punctal plugs

Blepharitis

Blepharitis is an inflammatory eyelid condition caused by chronic staphylococcal infection and malfunction of the meibomian (lipid) glands. It can cause secondary conjunctivitis and dry eye, and occasionally small corneal ulcers

Symptoms



A gradual onset or chronic history of:

- Gritty/sore eye
- Crusting on lashes
- Red eyes

Signs

- Red rimmed, thickened lid margins +/- mild to severe crusting on the eyelashes
- Blocked or oozing meibomian glands
- Red conjunctiva in some cases

Eye Examination

- Observe lid margins, conjunctiva and cornea with white light Instil 1 drop of fluorescein 0.25%
- Observe for corneal staining (preferably using a blue light source)

Treatment

- Give patient blepharitis information leaflet
- Eyelid hygiene – explain to patient how to perform this
- If severe blepharitis, prescribe chloramphenicol ointment 1% twice daily for one week, to be applied to eye lid margins after cleaning
- Ensure patient is informed that blepharitis is a chronic condition and that they need to clean their lids twice a day once current inflammation has settled
- Review as appropriate

Blepharitis cont…

Lid massage and hand hygiene

- ♦ Warm compress: boil some water and let it cool a little or use water from the hot tap. Water should be hot but not hot enough to burn. Soak cotton wool or a clean flannel in the water, wring it out and gently press onto your closed eyelids for two to three minutes at a time. Commercial heated eye masks are also available in most pharmacies and opticians.
- ♦ Lid massage: massage your eyelids by gently rolling your first finger over them in a circular motion or running the length of your finger down the eyelids towards the eyelashes. This helps to push out the oil from the tiny eyelid glands
- * Lid hygiene: use a moistened cotton bud to gently clean the inside/back edge of your eyelids then more firmly scrub off any flakes on the base of your eyelashes. This is best done in front of a mirror. The cotton bud may be moistened in cooled, boiled water. Commercial lid wipes are also available in most pharmacies or opticians.

Chalazion

A chalazion is a firm round lump in the upper or lower eyelid caused by a chronic inflammation/ blockage of the meibomian gland & unless acutely infected, it is harmless and most resolve if given enough time.

Symptoms

- Eyelid swelling or lump
- Eyelid tenderness
- If inflamed, the eye can be red, watering and sore

Signs

- Tender or non-tender round swelling, can be red, on or within the eyelid
- +/- mild conjunctivitis

Eye Examination

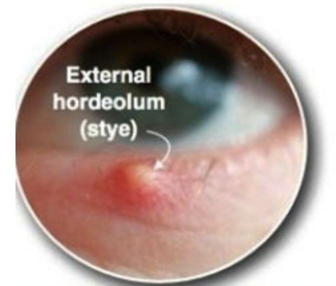
- Examine lids and conjunctiva with a white light
- Often red around chalazion, but watch out for spreading lid cellulitis

Treatment

- Give patient chalazion information leaflet
- Show patient how to apply a warm compress (see page 7)
- If acutely inflamed, prescribe chloramphenicol ointment three times daily for one to two weeks
- Chalaza will often disappear without further treatment within a few months
- If conservative therapy fails, chalazia can be treated by surgical incision (incision and curettage under local anesthetic)
- Refer if recurrent in same location or loss of lashes

Stye

A stye is a small abscess of the lash root on the eyelid. It appears as a painful yellow lump on the outside of the eyelid where the lash emerges. It is also known as an external hordeolum



Symptoms

- Watery eye (epiphora)   Red eye and eyelid
- Painful to touch

Signs

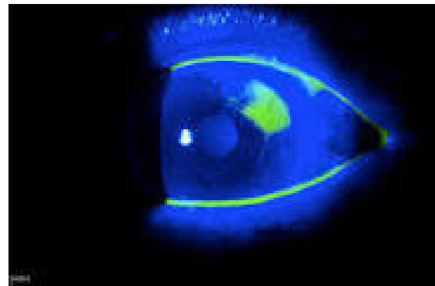
- A small tender red swelling that appears along the outer edge of the eyelid, which may turn into a yellow pus-filled spot, centred on an eyelash follicle
- Treatment

Treatment

- Give patient stye information leaflet
- Epilate the lash from the affected follicle with a pair of fine tweezers and prescribe chloramphenicol ointment three or four times daily for one week
- A warm compress (see page 9)
- It is very rare to require surgical drainage
- If there is definite spreading cellulitis in the lid, it requires oral antibiotics (e.g. coamoxiclav)

Corneal Abrasion

Corneal abrasions are generally a result of trauma to the surface of the eye. Common causes include a fingernail scratching the eye, walking into a tree branch and getting grit in the eye, particularly if the eye is then rubbed. Injuries can also be caused by contact lens insertion and removal, but beware the possibility of a corneal ulcer in contact lens wearers, especially those who wear soft lenses.



Symptoms

- Immediate pain
- Watering
- Foreign body sensation
- Light sensitivity

Signs

- Fluorescein drops will stain the abraded area

Eye Examination

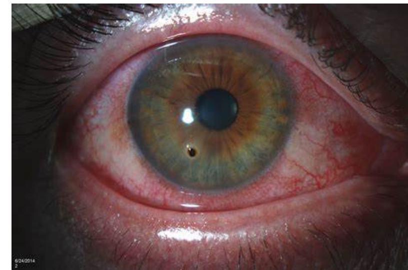
- Observe conjunctiva and cornea with white light to exclude foreign body or corneal clouding
- Instil 1 drop of proxymethacaine 0.5% with fluorescein 0.25%
- Observe for corneal staining (preferably using a blue light source) Evert upper eye lid if any history of foreign body in the eye
- Watch out for signs of a corneal laceration such as a shallow anterior chamber or distorted pupil

Treatment

- Give patient corneal abrasion information leaflet
- Instill chloramphenicol ointment 1% once immediately
- Double eye pad secured with three strips of tape (to remain on for 12 to 24 hours)
- Inform patient that this can be removed if this is uncomfortable and advise use of sunglasses

Corneal Foreign Body

Corneal foreign bodies are common. There may be a history of trauma, or using tools (e.g. hammering) without protective goggles or feeling something blow into the eye. Metal foreign bodies can be very adherent and difficult to remove.



Symptoms

- Foreign body sensation
- Watering
- Pain
- Ask about use of power tools and consider the possibility of an intraocular foreign body if high velocity

Signs

- Visible corneal foreign body
- Red eye
- Contact lens stains with fluorescein

Eye Examination

- Observe conjunctiva and cornea with white light
- Instill 1 drop of proxymetacaine 0.5% with fluorescein 0.25% Observe for corneal staining preferably using a blue light
- If the presence of a corneal foreign body is confirmed, moisten a cotton bud with a few drops of sodium chloride 0.9%/proxy and gently remove the foreign body with the cotton bud, sweeping it away from the corneal surface
- Only use a needle to remove if you have been trained and have appropriate magnification
- Refer if metal foreign body
- Re-examine the eye to ensure the foreign body has been fully removed

Treatment

- Give chloramphenicol ointment four times daily for five days
- Consider padding and oral analgesia for corneal abrasion
- Offer advice, e.g. on the wearing of safety glasses, to prevent another injury

Sub Tarsal Foreign Body

Sub tarsal foreign bodies (on the inner lid surface) are a common reason for attendance at an emergency eye clinic. They occur more commonly inside the upper eye lid. There may be a history of trauma or feeling something blow into the eye.

Symptoms

- Foreign body sensation
- Watering
- Pain

Signs

- Visible sub-tarsal foreign body
- Red eye
- Linear corneal abrasion

Eye Examination

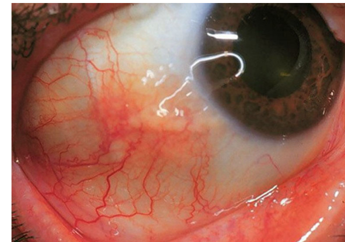
- Observe conjunctiva and cornea with white light Instill 1 drop of fluorescein 0.25%.
- Observe for corneal staining preferably using a blue light
- Evert upper eye
- Moisten a cotton bud with a few drops of sodium chloride 0.9%
- Gently remove the foreign body with the cotton bud, sweeping it away from the corneal surface
- Re-examine the eye to ensure the foreign body has been fully removed

Treatment

- Give chloramphenicol ointment four times daily for five days
- Consider padding and oral analgesia as for corneal abrasion
- Offer advice, e.g. on the wearing of safety glasses, to prevent another injury

Episcleritis

Episcleritis is a benign, self-limiting inflammatory disease affecting the episclera, the loose connective tissue between the conjunctiva and sclera, and causes mild discomfort. It is usually idiopathic and only rarely associated with systemic disease (e.g. rheumatoid arthritis).



Symptoms

- Mild ache/soreness of the eye
- Eye is mildly tender to touch
- Red eye

Signs

- Segmental or focal redness which can be raised (nodular)
- Redness disappears on compression and redness mobile on white of the eye with cotton bud – redness is neither mobile or compressible in scleritis

Eye Examination

- Observe conjunctiva and cornea with white light
- Instill 1 drop of fluorescein 0.25%
- Observe for corneal staining preferably using a blue light
- You may wish to use a cotton bud to compress and move the red area

Treatment

- Inform patient that the cause of episcleritis is unknown and that although symptoms are uncomfortable, the condition is usually self-limiting and not harmful
- Oral anti-inflammatories such as ibuprofen will help with the discomfort of episcleritis
- Artificial tears, which can be bought over the counter, will help keep the eye comfortable
- Review as appropriate

REFERRAL MANAGEMENT

Ophthalmic Emergency Department	Ophthalmic Emergency Department referrals	Non Urgent routine/ Outpatients referrals
8am-17:00am Monday – Friday and 9am-17:00 Sat-Sun No Walk in service Telephone triage in place see Information below To refer a patient outside of these hours or for urgent advice please call the Ophthalmologist on Call on	Send a referral via **Healthlink** or email the referral to ed.reception@rveeh.ie Inform your patient that you are sending the referral and instruct your patient to call 01 6644600 if they do not receive a call back in a timely manner.	**Outpatient referrals** Please refer patients electronically via Healthlink or by emailing a referral to appoinments@rveeh.ie

RVEEH EMERGENCY DEPARTMENT

There is currently **NO WALK IN EMERGENCY SERVICE.**

All patients especially those with non-urgent conditions are advised if possible to contact their GP or Optician prior to contacting the emergency department.
GP's and Optometrists can refer patients to the emergency department by sending a referral via **Healthlink** or by emailing a referral to ed.reception@rveeh.ie
Please inform your patient that you are sending the referral and ensure that their correct mobile phone number/landline phone number is on the referral. Give your patient the phone number for Telephone Triage 01-6644600 and instruct the patient to call us if they do not hear from us in a timely manner.
If your patient has an eye emergency, they will be triaged over the phone by a member of the medical team and an appointment will be made for the patient depending on the urgency of their condition.
To speak with a member of the triage team please call: 01-6644600
Patients that present outside the Emergency Department with Chemical injuries/ Penetrating eye injuries should alert security staff immediately so that their care can be prioritised.

Ophthalmic telephone triage is provided from:
8am-17:00am Monday – Friday and 9am-17:00 Sat-Sun
For eye emergencies outside of these hours please contact your GP
Out of hours GP Northside Call D-DOC 1850 22 44 77
Out of hours GP Southside: Call EDOC 01-2234500
Or attend your nearest Emergency Department service.
Patients can be accepted outside of the above hours by doctor to doctor agreement only. GP's/Optometrists that require urgent advice or that want to refer a patient outside of the above hours please call **016644600** and ask to speak with the Ophthalmologist On Call.

Patients that have had recent eye surgery that require urgent advice outside of the above hours can call 016644600 and ask to speak with the Nurse in charge.
Emergency Department GP Liaison Nurse (GPLN)
Hours of office
Tuesday 8-6pm and Thursday 8-5.30
Mobile: 086 852 0846 email gp.liaison@rveeh.ie (Please do not use this email for urgent queries or for referrals this email is only manned part-time)Healthcare professionals GPs/Optometrists can contact the GPLN:

- If you have concerns regarding a patient you are referring.
- If you want to discuss a patient that has attended the emergency department.
- For advice on referring patients.
- To follow up on test results/ care
- To discuss community services and appropriate referral pathways.