

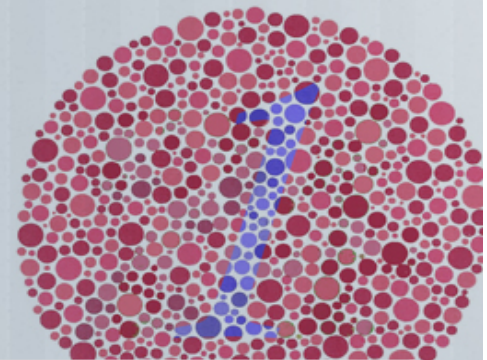
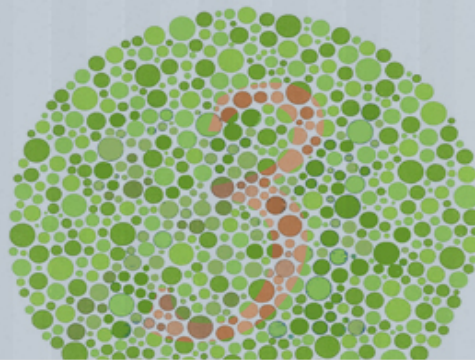
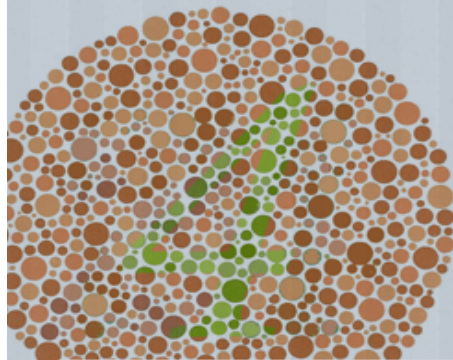
Red Eye



431
Teams
medical students

Ophthalmology Team

Done By:
Mosaed Khalid Aldekhayel



Red eye

- One of the most frequent presentations to the emergency.
- The physician must differentiate between serious vision-threatening and simple-benign conditions.
- The following conditions cause red eye:

1- Blepharitis:

- Inflammation of the lid margin, associated with styes (**inflammation of the sebaceous glands of Zeis**) and Meibomian gland dysfunction.
- Management: Lid hygiene, topical antibiotics and lubricants.

2- Conjunctivitis:

	Bacterial	Viral	Allergic	Chlamydial
Presentation	Tearing, foreign body sensation, photophobia.	Tearing, foreign body sensation, photophobia. Usually following upper respiratory tract infection.	Itching, history of rhinitis, asthma.	Tearing, foreign body sensation, photophobia. Usually in sexually active individuals.
Discharge	Mucopurulent,	Watery.	Watery.	Mucopurulent.
Reaction	Papillary.	Follicular.	Papillary.	Follicular.
Organism/cause	Strep. Pneumoniae, Staph. Coccus, Staph. Epidermidis and H. Influenzae (less than 5 years of age).	Adenovirus.	Immune reaction.	Chlamydia Trachomatis.
Treatment	Empirical antibiotics.	Treat the symptoms.	Cold compresses (to reduce blood supply). Steroids and antihistamines.	Empirical antibiotics.

- Steroid use should be avoided unless necessary and under the supervision of the physician because it increases the risk of infections and developing glaucoma and cataract.

3- Dry eye:

- Has many causes, and the management is directed toward the cause itself.

4- Pterygium:

- Benign growth of the conjunctiva.
- Might be caused by ultraviolet light exposure.
- Management: Sunglasses, artificial tears. When to do surgery? 1) Loss of vision involving visual axis, 2) decreased vision secondary to irregularity to cornea leading to stigmatism, and 3) cosmetics.

5- Ectropion:

- The lower eyelid turns outward, treated by surgery.

6- Trichiasis:

- Misdirection of eyelashes toward the cornea, caused by fibrosis or scarring secondary of trachoma.

7- Infectious keratitis.

8- Corneal abrasion.

9- HSV keratitis (dendrites is seen with fluorescein stain)

10- Foreign body.

11- Nasolacrimal obstruction.

- Can lead to dacryocystitis (inflammation of the lacrimal sac).
- Patient presents with pain, redness and excessive tearing.
- Most commonly caused by Staph. Coccus, Strep. Coccus and Diptheroids.

12- Conjunctival tumor.

13- Iritis.

14- Episcleritis.

- In most cases, it is associated with gout. Measurement of uric acid level is useful when the inflammation is repeated.

15- Scleritis:

- Severe pain, tearing and photophobia. Tender to touch.
- Associated with systematic diseases (for example rheumatoid arthritis).

16- Subconjunctival hemorrhage:

- Usually secondary to trauma.

Summary

- Pain is associated with scleritis, keratitis and elevated intraocular pressure.
- Pain is NOT associated with conjunctivitis, episcleritis and blepharitis.
- Reduced vision is NOT associated with conjunctivitis, episcleritis and blepharitis.
- Distribution of redness can be helpful:
 - Around the limbus: indicative of intraocular disease.
 - Diffuse redness involving tarsal and bulbar conjunctiva: indicative of conjunctivitis.
 - Focal or diffuse redness of the globe: indicative of episcleritis.
 - Eyelid margins: indicative of blepharitis.
 - Bluish redness: indicative of scleritis.
 - Vesicles of the lids or periocular skin: typical of ophthalmic zoster, and less commonly varicella or primary herpes simplex virus infection.

Sources:

- Slides.
- Notes written within the lecture.
- Vaughan & Asbury's General ophthalmology, 18th edition.