



Eye Disorders and Diseases

The Second Lecture

MSc in Optics and Laser : Hamza Nader

Eye disorders and diseases

1-Amblyopia

2-Astigmatism

3-Myopia

4-Hyperopia

5-Presbyopia

6-Conjunctivitis

7-Iritis

8-Retinitis Pigmentosa

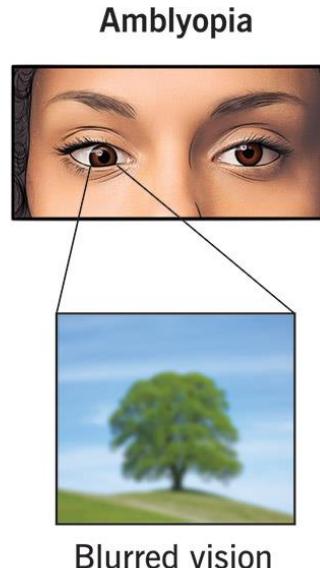
Amblyopia:-

Detailed terminology

- **Amble:** weak or feeble
- **Opia:** vision or sight

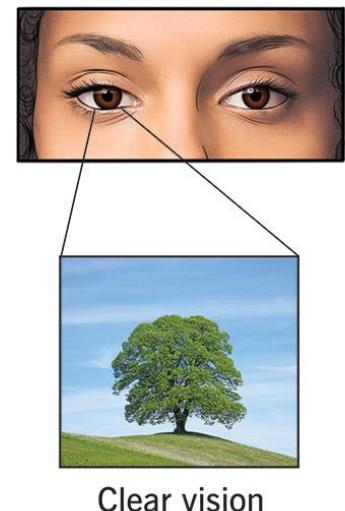
It Amblyopia usually occurs in one eye. It is called (lazy eye) . This occurs when the brain does not fully develop vision in the eyes.

Amblyopia (lazy eye)



Amblyopia

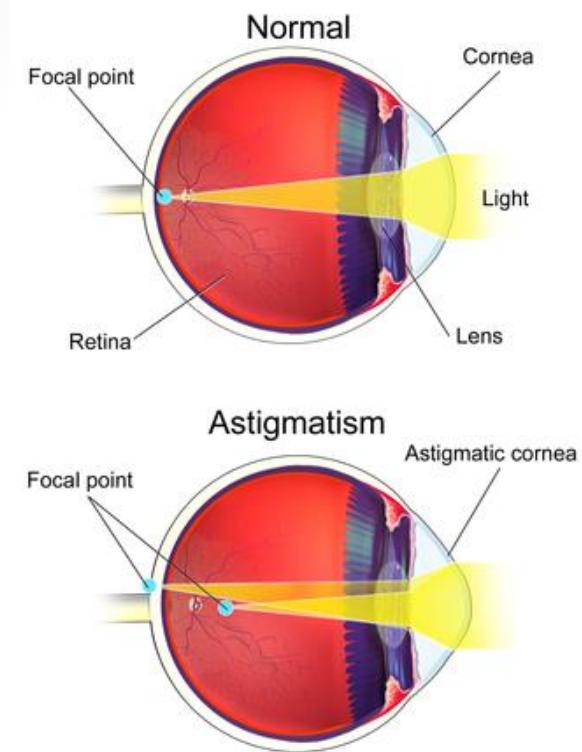
Healthy eye



Clear vision

Astigmatism

- **A:** without or absent
- **Stigmat:** a point or spot
- **ism:** a condition or disorder



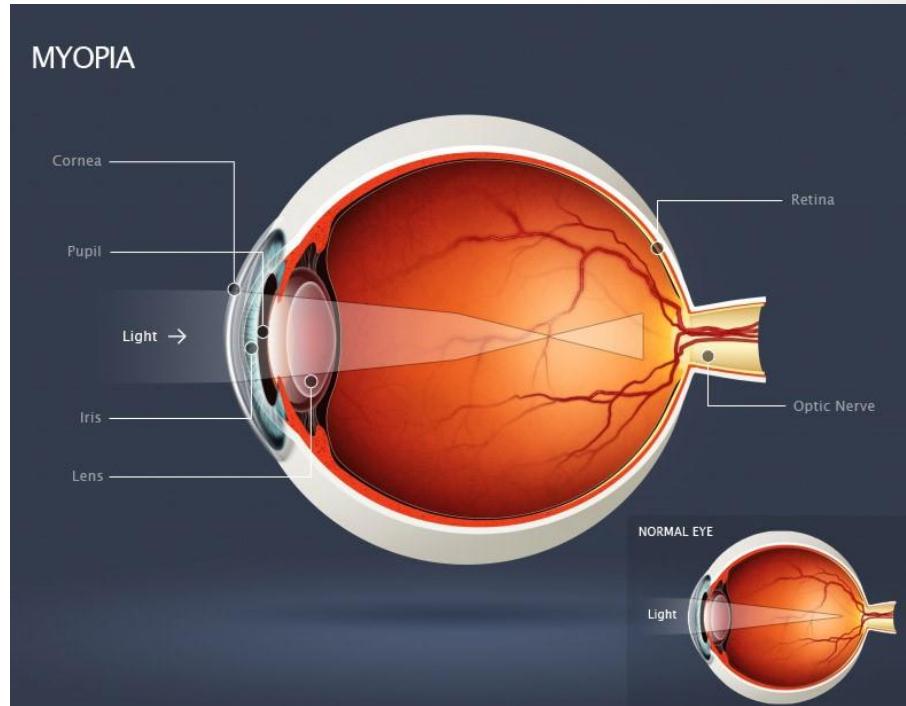
Astigmatic cornea distorts the focal point of light in front of and/or behind the retina

It is a defect in light refraction due to an irregular curvature of the cornea or lens, which leads to the light rays not converging at a single point on the retina, causing blurred vision.

Myopia:-

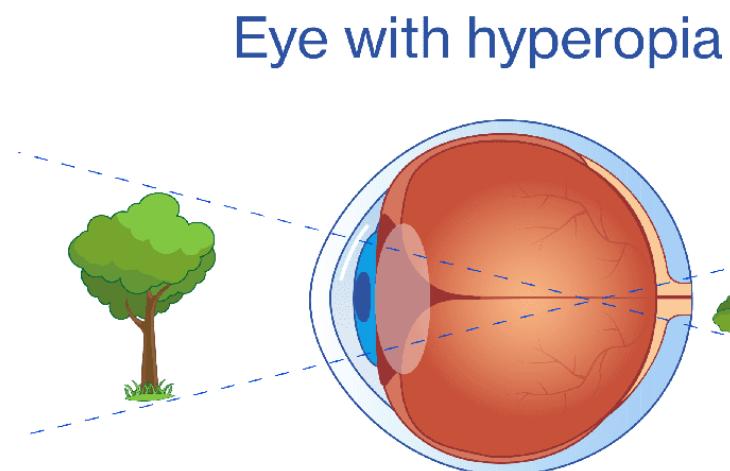
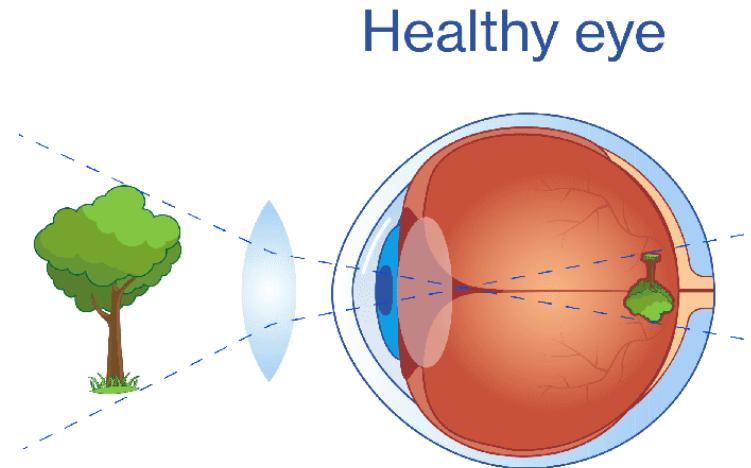
- **Myop** From the Greek word (**myein**), meaning: to close or narrow
- **Opia:** vision/sight

Difficulty seeing distant objects clearly while nearby objects are clearer



Hyperopia:-

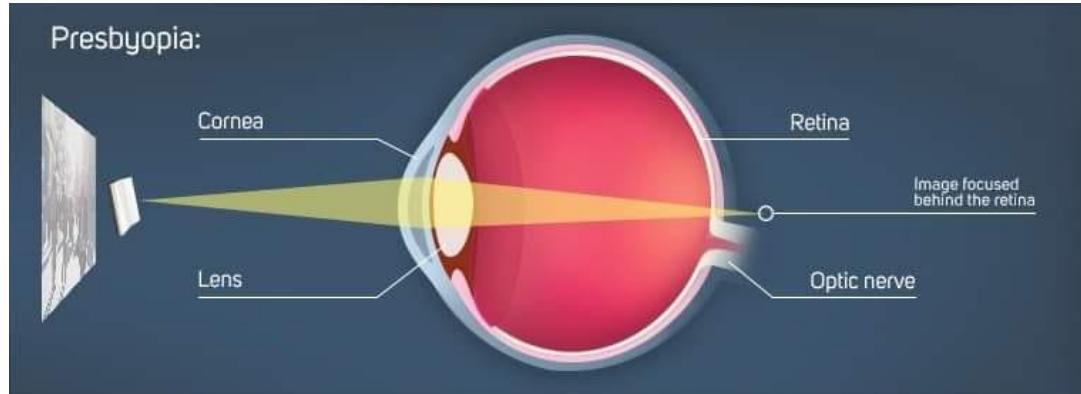
- **Hyper:** above/more than normal
- **opia :** vision/sight
- **Difficulty seeing nearby objects clearly while distant objects are clearer.**



Presbyopia:-

- Presby : old age
- Opi : vision

A physiological decrease in the eye's ability to focus due to aging.



Conjunctivitis:-

- **Conjunctiva** -From the word conjunctiva, meaning: the conjunctiva (the membrane that connects the eyelid to the eyeball).
- **Itis** : inflammation.
- An inflammation affecting the conjunctiva of the eye, known as pink eye.



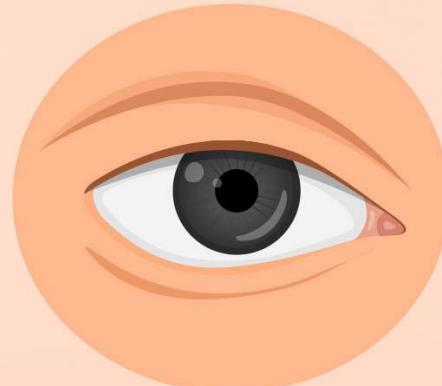
Possible signs of pink eye (conjunctivitis)

Iritis:-

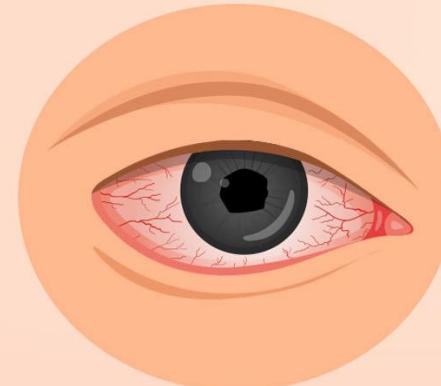
- **Iris** : the iris (the colored part of the eye)
- **-itis**: inflammation

One of the most common types of eye inflammation, it affects the iris and is often associated with autoimmune diseases.

Iritis: Types, Causes, Symptoms, Diagnosis, and Treatment



NORMAL



IRITIS

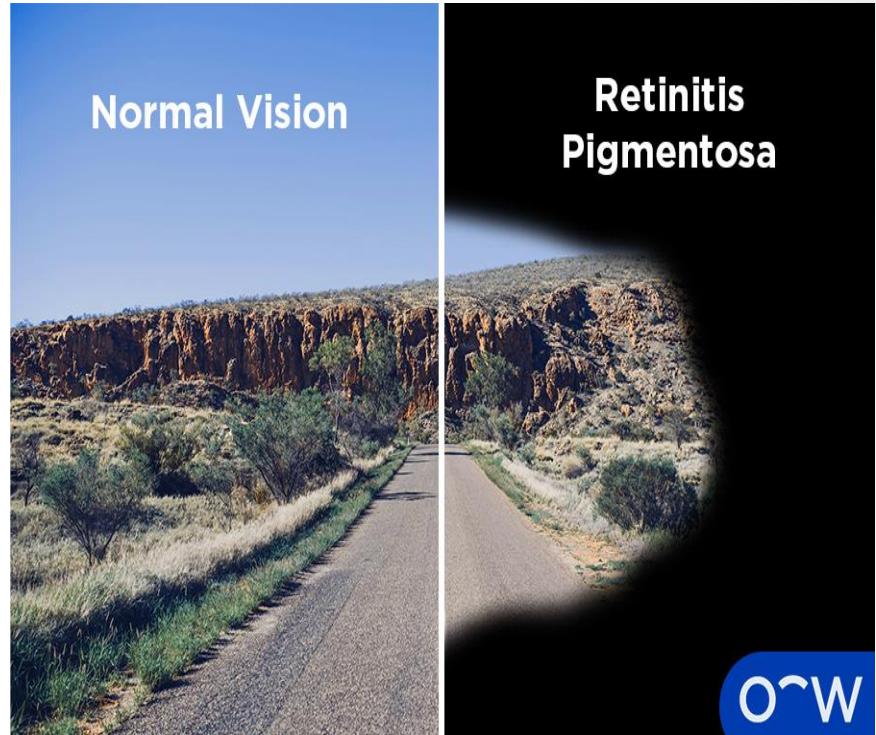
Retinitis Pigmentosa

Retin From Retina, meaning: retina

- **itis**: inflammation

Retinitis inflammation of the retina

- **Pigment**: pigment/color
- **osa**: medical condition



A hereditary disease that affects the retina and gradually impairs vision.

Thank
you