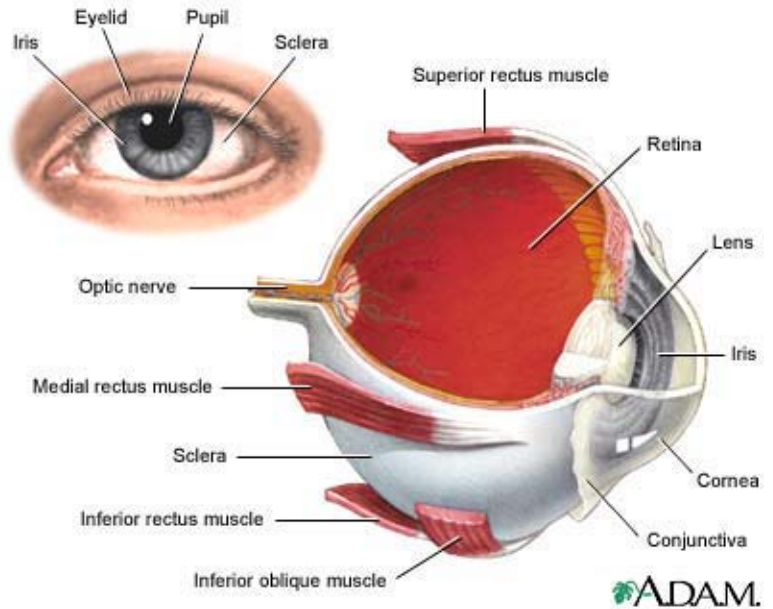


THE EYE

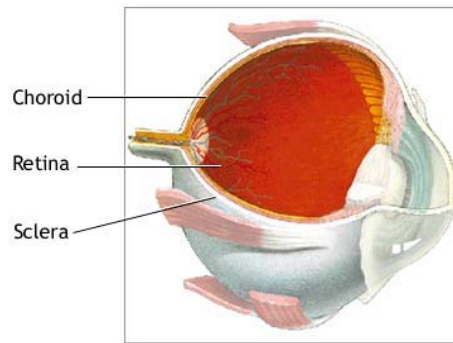
The eye is the organ of sight, a nearly spherical hollow globe filled with fluids (humors). The outer layer or tunic (sclera, or white, and cornea) is fibrous and protective. The middle tunic layer (choroid, ciliary body and the iris) is vascular. The innermost layer (the retina) is nervous or sensory. The fluids in the eye are divided by the lens into the vitreous humor (behind the lens) and the aqueous humor (in front of the lens). The lens itself is flexible and suspended by ligaments which allow it to change shape to focus light on the retina, which is composed of sensory neurons.



Definition

CHOROID

The choroid is the middle layer of the eye that contains blood vessels and connective tissue that supplies nutrients to the inner portion of the eye.



ADAM.

The layer of blood vessels and connective tissue between the [sclera](#) (white of the eye) and [retina](#). It is part of the [uvea](#) and supplies nutrients to the inner parts of the eye. Inflammation of the choroid is known as [choroiditis](#).

SCLERA

The white portion of the eye. A tough, fibrous tissue that extends from the cornea to the optic nerve. It is commonly referred to as the "white of the eye."

RETINA

Internal layer of the eye that receives and transmits focused images. The retina is normally red due to its rich blood supply. It can be seen with an ophthalmoscope, which allows the examiner to see through the pupil and lens to the retina. Changes in color of the retina or changes in the appearance of retinal blood vessels may indicate disease. Changes in color perception and in vision also indicate disease and indicate the need for a retinal examination.

UVEA

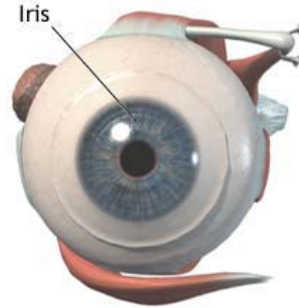
Vascular tunic; Middle coat of the eyeball

Definition

Vascular layer of the eye beneath the sclera. It consists of the iris, ciliary body, and choroid, which form a pigmented layer.

IRIS

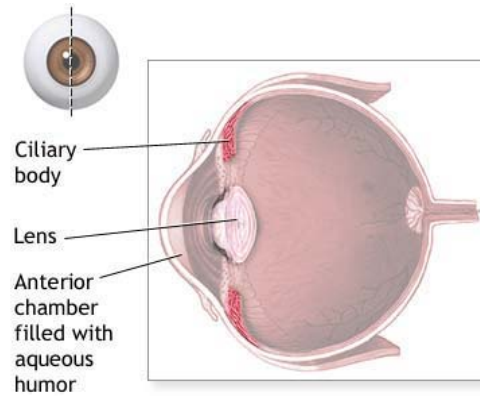
The colored portion of the eye. A membrane located between the cornea and lens. Its round, central opening (the pupil) regulates the entrance of light into the eye by contracting and dilating



ADAM.

CILIARY BODY

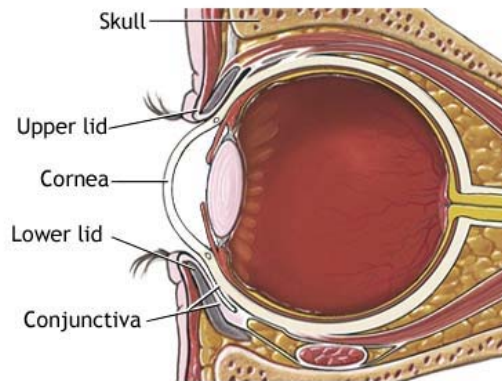
Vascular structure of the eye that secretes the transparent liquid within the eye (aqueous humor) and contains the ciliary muscle, responsible for changing the shape of the lens.



ADAM.

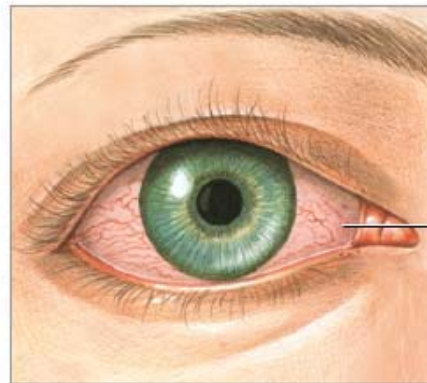
CORNEA

The cornea is the clear layer covering the front of the eye. The cornea works with the lens of the eye to focus images on the retina



RED EYE (BLOODSHOT or ocular irritation)

Apply warm compresses to soften crusts on the eyelids. For bacterial infections, washing the eye(s) gently will help remove some of the bacteria, but your health care provider should still be contacted. Eyedrops (such as berberil) may soothe minor conjunctivitis, but will not cure the problem.



Scleral
irritation

 ADAM.

Alternative names

Bloodshot eyes; Scleral injection; Conjunctival injection.

Definition

Red eyes are characterized by dilated blood vessels causing the appearance of redness on the surface of the eye.

Considerations

Bloodshot eyes appear red because the vessels in the surface of the white portion of the eye ([sclera](#)) become enlarged. This may result from mechanical irritation, environmental irritants (such as extremely dry air, excess sun exposure), [allergic reactions](#), infection, and other medical conditions.

A bright red, uniformly dense bloody area on the sclera results from a small amount of bleeding into the conjunctiva. It is often first noted in the morning on arising.

This is a fairly common occurrence, and of little significance. If upon awakening in the morning, you notice a bloody blotch in one eye that doesn't hurt, but just looks bad, don't worry. It is usually caused by straining or coughing, and it generally clears up on its own after a few days.

Common Causes

- Straining or coughing
- [Blepharitis](#)
- [Foreign bodies in the cornea and conjunctiva](#)
- [Conjunctivitis](#)
- [Corneal abrasion](#)
- [Corneal ulcers and infections](#)
- [Iritis](#)
- [Ocular lacerations and intraocular foreign bodies](#)
- [Uveitis](#)
- Bleeding problems from excess use of blood thinning drugs

Home Care

For fatigue or eyestrain, try to rest. No treatment is necessary. Otherwise, see your primary health care provider or an ophthalmologist for medical treatment.

If [conjunctivitis](#) is suspected or confirmed, avoid touching the infected eye and then rubbing the other eye -- this condition is very contagious.

Call your health care provider if

- Bloodshot eyes persists for longer than one or two days.
- There is eye pain and vision problems.

What to expect at your health care provider's office

The medical history will be obtained and a physical examination performed.

Medical history questions documenting eye redness in detail may include:

- Location
 - Are both eyes affected?
 - If only one eye, which one?
 - What part of the eye is affected -- all of the white part, or just a small location?
- Time pattern
 - Did it begin suddenly?
 - Has it ever happened before?
 - Does it persist?
- Other
 - Does it get worse after movement of the eyes?
 - What other symptoms are also present?

The physical examination should include a detailed eye examination.

Intervention:

The eyes may need irrigation with normal saline solution, and any foreign bodies will need to be removed. Eye drops may be prescribed.

After seeing your health care provider:

You may want to add a diagnosis related to bloodshot eyes to your personal medical record.