

Disorders of the Eye

by Sophia



WHAT'S COVERED

In this less, you will learn about the characteristics and causes of various common disorders of the eye. These disorders can be caused by anything from illness to injury, diseases, genetics, or aging. Specifically, this lesson will cover:

1. Color Blindness

Color blindness is a type of disorder that is more common in males than females. Red-green color blindness is the most common type of color blindness. This disorder is inherited and occurs when the cone cells have altered pigments. The altered cones and pigments have a difficult time detecting red and green light, which means the brain cannot tell the difference between these two colors.



TERM TO KNOW

Color Blindness

An eye disorder in which a person is lacking cone cells that allow them to detect certain colors; most often this occurs with the colors red and green.

2. Blurred Vision Disorders

Astigmatism is a type of disorder that's characterized by blurred vision and is an inherited disorder. This causes parts of the eye to be misshapen, generally the lens or the cornea, affecting the eye's ability to properly focus light, causing blurred vision.

Myopia, also known as nearsightedness, is a disorder that occurs when distant objects appear blurred. This happens because the eyeball is wider than it is tall, and images focus in front of the retina, rather than on it.

Hyperopia, is the opposite of myopia; rather than distant objects appearing blurred, near objects will appear blurred. This happens because the eyeball is taller than it is wide so that images will focus behind the retina rather than on it. Most people who wear glasses for whatever reason, generally do so because of either myopia or hyperopia.



TERMS TO KNOW

Astigmatism

An eye disorder resulting in blurred vision due to the misshapen lens or cornea of the eye.

Myopia

An eye disorder in which a person has difficulty seeing distant objects because the eyeball is wider than it is tall, causing images to focus in front of the retina.

Hyperopia

An eye disorder in which a person has difficulty seeing near objects because the eyeball is taller than it is wide, causing images to focus behind the retina.

3. Conjunctivitis

Conjunctivitis is a type of disorder characterized by redness, discharge, and discomfort of the eye. It is generally caused by bacteria or allergies. Remember the conjunctiva is a clear, transparent mucous membrane on the outside of the eye that helps protect it.



TERM TO KNOW

Conjunctivitis

An eye disorder caused by bacteria or allergies that causes the membrane of the eye to become inflamed.

4. Retinoblastoma

Retinoblastoma is a deterioration of vision caused by a tumor and results in the surgical removal of the eye. This cancer of the retina could then spread to the optic nerve and the brain; because of the fear of this cancer spreading, the eye is often surgically removed.



TERM TO KNOW

Retinoblastoma

Cancer of the retina.

5. Cataracts

Cataracts are a clouding of the lens of the eye, affecting how light can enter. When light enters, it is abnormally scattered because of the clouding of the lens. It not only affects how a person can see, but can also affect the appearance of the eye, giving the lens a milky appearance. This can be caused by aging or injury and is often common in people who have diabetes.



TERM TO KNOW

Cataracts

A disorder of the eye in which the clouding of the lens affects how light enters the eye.

6. Glaucoma

Glaucoma is when the aqueous humor builds up in the eyeball and causes too much pressure within the eye. The excess pressure presses on different nerves within the eye and causes vision eventually to start to deteriorate. Glaucoma is most often associated with aging.



TERM TO KNOW

Glaucoma

The deterioration of vision due to the buildup of aqueous humor in the eye.

7. Retinal Detachment

Retinal detachment is when a person has blurred vision, loss of peripheral vision, or blindness because the retina has detached. This can happen because of an injury or a blow to the head, causing a tear in the retina. If this is caught very quickly, the different symptoms can usually be reversed. If it's something that's allowed to go untreated, it could heal on its own, but generally will have more long term negative effects.



TERM TO KNOW

Retinal Detachment

An eye disorder resulting in a tear in the retina and vision problems.



SUMMARY

This lesson has been an overview of various disorders of the eye, their characteristics, and causes. Specifically, you learned about the following disorders: **color blindness, disorders connected to blurred vision, conjunctivitis, retinoblastoma, cataracts, glaucoma, and retinal detachment.**

Keep up the learning and have a great day!

Source: THIS WORK IS ADAPTED FROM SOPHIA AUTHOR AMANDA SODERLIND



TERMS TO KNOW

Astigmatism

An eye disorder resulting in blurred vision due to the misshapen lens or cornea of the eye.

Cataracts

A disorder of the eye in which the clouding of the lens affects how light enters the eye.

Color Blindness

An eye disorder in which a person lacks cone cells that allow them to detect certain colors. Most often this occurs in the form of "red-green colorblindness", where the person can't tell the difference between the two colors.

Conjunctivitis

An eye disorder caused by bacteria or allergies which causes the membrane of the eye to become inflamed.

Glaucoma

The deterioration of vision due to the buildup of aqueous humor in the eye.

Hyperopia

An eye disorder in which a person has difficulty seeing near objects because the eyeball is taller than it is wide, causing images to focus behind the retina.

Myopia

An eye disorder in which a person has difficulty seeing distant objects because the eyeball is wider than it is tall, causing images to focus in front of the retina.

Retinal Detachment

An eye disorder resulting in a tear in the retina and vision problems.

Retinoblastoma

Cancer of the retina.