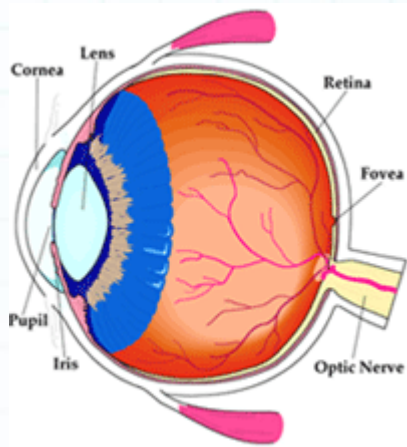


Ophthalmology



Ophthalmology is the branch of medicine that deals with the anatomy, physiology and diseases of the eye. An ophthalmologist is a specialist in medical and surgical eye problems. Since ophthalmologists perform operations on eyes, they are both surgical and medical specialists. A multitude of diseases and conditions can be diagnosed from the eye. The word ophthalmology comes from the Greek roots ophthalmos, i.e., "eye" and i.e., "study of, discourse"; ophthalmology literally means "the science of eyes".

Diseases of eye:

1) GLAUCOMA

Glaucoma is a condition that causes damage to your eye's optic nerve and gets worse over time. It's often associated with a buildup of pressure inside the eye. Glaucoma tends to be inherited and may not show up until later in life.

The increased pressure, called intraocular pressure, can damage the optic nerve, which transmits images to the brain. If damage to the optic nerve from high eye pressure continues, glaucoma will cause permanent loss of vision. Without treatment, glaucoma can cause total permanent blindness within a few years.

Because most people with glaucoma have no early symptoms or pain from this increased pressure, it is important to see your eye doctor regularly so that glaucoma can be diagnosed and treated before long-term visual loss occurs.

If you are over age 40 and have a family history of glaucoma, you should have a complete eye exam with an eye doctor every one to two years. If you have health problems such as diabetes or a family history of glaucoma or are at risk for other eye diseases, you may need to visit your eye doctor more frequently.

Why Does Pressure Rise in the Eye to Cause Glaucoma?

Glaucoma usually occurs when pressure in your eye increases. This can happen when eye fluid isn't circulating normally in the front part of the eye.

Normally, this fluid, called aqueous humor, flows out of the eye through a mesh-like channel. If this channel becomes blocked, fluid builds up, causing glaucoma. The direct cause of this blockage is unknown, but doctors do know that it can be inherited, meaning it is passed from parents to children.

Less common causes of glaucoma include a blunt or chemical injury to the eye, severe eye infection, blockage of blood vessels in the eye, inflammatory conditions of the eye, and occasionally eye surgery to correct another condition. Glaucoma usually occurs in both eyes, but it may involve each eye to a different extent.

Glaucoma

The exact cause of glaucoma isn't known. Experts think that increased pressure in the eye (intraocular pressure) may cause the nerve damage in many cases. But some people who have glaucoma have normal eye pressure.

Glaucoma most often occurs in adults over age 40, but it can also occur in young adults, children, and even infants. In African-Americans, glaucoma occurs more frequently and at an earlier age and with greater loss of vision.

- **Cornea and External Disease:** This subspecialty involves the diagnosis and management of diseases of the cornea, sclera, conjunctiva and eyelids, including corneal dystrophies, microbial infections, conjunctival and corneal tumors, inflammatory processes and anterior ocular manifestations of systemic diseases. Training in this area frequently includes corneal transplant surgery and corneal surgery to correct refractive errors.
- **Glaucoma:** This subspecialty includes the treatment of glaucoma and other disorders that may cause optic nerve damage by increasing intraocular pressure. This area involves the medical and surgical treatment of both pediatric and adult patients.
- **Neuro-Ophthalmology:** Involving the relationship between neurologic and ophthalmic diseases, neuro-ophthalmology also deals with local pathology affecting the optic nerve and visual pathways. Over 50 percent of all intracranial lesions involve the visual or oculomotor pathways. Neuro-ophthalmology is generally practiced as a nonsurgical subspecialty but can be combined with surgery of the eye and orbit.
- **Ophthalmic Pathology:** The ophthalmic pathologist has training in both ophthalmology and pathology, typically in that order. Because of the unique combination of skills involved in this subspecialty, it is usually the ophthalmic pathologist, rather than the general pathologist, who examines tissue specimens from the eye and adnexa.
- **Ophthalmic Plastic Surgery:** The specialty of ophthalmology includes oculofacial plastic surgery. This combines orbital and periocular surgery with facial plastic surgery and includes the clinical practice of aesthetic plastic and reconstructive surgery of the face, orbit, eyelid, and lacrimal system. With this unique combination of skills ophthalmologists perform facial plastic surgery, eyelid surgery, orbital surgery and lacrimal surgery.
- **Pediatric Ophthalmology:** The bulk of pediatric ophthalmic practice involves the medical and surgical management of strabismus, amblyopia, genetic and developmental abnormalities and a wide range of inflammatory, traumatic and neoplastic conditions occurring in the first two decades of life. This subspecialty also deals with the ocular manifestations of certain systemic disorders.

- Vitreoretinal Diseases: This subspecialty involves both the medical and surgical treatment of retinal and vitreoretinal disease. The types of diseases treated include manifestations of local, systemic and genetic diseases as they affect the retina and vitreous. Diagnosis involves the use and interpretation of ultrasound, fluorescein angiography and electrophysiology. Treatment methods include laser therapy, cryotherapy, retinal detachment surgery and vitrectomy (removal of the vitreous).

References:

<http://en.wikipedia.org/wiki/Ophthalmology>

<http://www.aaopt.org/about/what-is-ophthalmology>