Common Abbreviations and Terms Used In Ophthalmology
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**Abbreviation or Term**  | **Definition**
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O.D. or R.E. | Right Eye
O.S. or L.E. | Left Eye
O.U. | Both eyes together/(each eye)
D. (diopter) | Unit of measurement of strength of refractive power of lenses. (A 1-diopter lens brings parallel light rays to a focus at 1 meter from the lens.)
E.O.M. | Extraocular muscles
HT (hypertropia) | Upward deviation of one eye relative to the other
ET (estropia) | Inward deviation of one eye relative to the other
XT (extropia) | Outward deviation of one eye relative to the other
+ | Plus: refers to glasses power to correct far-sightedness
- | Minus: Refers to glasses power to correct near sightedness
Diplopia | Seeing one object as two/double vision
Ectropion | Turning out (eversion) of eyelid
Entropion | Turning in of eyelid
Epiphora | Condition of tears overflowing from an eye continuously
Homonymous hemianopia | Loss of visual field in each eye either to the left or right of center
Photophobia | Abnormal sensitivity to light
Presbyopia | Lessening of power of accommodation (focusing at near) secondary to aging
Ptosis/Blepharoptosis | Drooping of upper eyelid

**Glossary of Ophthalmological Terms**

**Accommodation:** Adjustment of the eye for seeing objects at arm's length and nearer, accomplished by altering the shape of the crystalline lens by action of the ciliary muscle, thus changing its power and focusing a clear image on the retina.

**Amblyopia:** Poor vision acquired through lack of use the eye, typically occurs in children with misalignment of eyes and preference for one eye.

**Anterior Chamber:** Fluid-filled space between the cornea and iris. Aqueous
Humor: Clear fluid which fills the front part, or anterior chamber of the eye.

Asthenopia: Eye strain caused by lack of glasses or improper glasses correction.

Astigmatism: Defective curvature of the refractive surfaces of the eye as a result of which light rays are not sharply focused on the retina for either near or distance vision.

Binocular Vision: The ability to use the two eyes simultaneously to focus on the same object and to fuse the two images into a single image, which gives a correct interpretation of its solidity and its position in space.

Cataract: A condition in which the lens of the eye becomes hard and/or cloudy with consequent loss of visual acuity.

Chiasm: The confluence of optic nerve fibers in both eyes, which is just above the pituitary gland.

Cones and Rods: Two types of light-sensitive receptors that are present in the retina and generate visual impulses transmitted to the brain. Cones are sensitive to fine detail and color; rods are concerned with motion and vision at low degrees of illumination (as in night vision).

Convergence: The process of directing the visual axes of the two eyes to a near object of regard by in turning of each eye.

Convergence, Near Point of: The nearest place from the face, which the eye can direct their gaze simultaneously; normally about three inches from the nose when young, becomes more remote with age.

Cornea: Clear front surface of the eye in front of the iris.

Corneal Transplant: Operation to restore vision by replacing a section of opaque or abnormal cornea with transparent cornea (from a donor).

Cycloplegics: A group of drugs, instilled into the eye, which cause temporary paralysis and relaxation of the ciliary muscles that control accommodation and dilation of the pupil; used to ascertain the refraction.

Diopter (abbreviation: D): Unit of measurement of strength or refractive power of lenses.

Diplopia: Double vision, i.e., perception of two separate images of a single object.

Divergence: Simultaneous turning outward of the eyes away from each other when looking from a near to far object.

Dyslexia: Inability to read or understand printed symbols; may be caused by many factors, usually nonocular.

Enucleation: Complete surgical removal of the eyeball.

Esophoria: A tendency of the eye to turn inward.

Esotropia: An observable turning in of one eye, "crossed eye."

Exophoria: A tendency of one eye to turn outward.

Exophthalmos: Abnormal protrusion or bulging of an eye from the orbit.

Exotropia: An observable out-turning of one eye.

Field of Vision: The entire area seen at one time by the fixed eye; i.e., without shifting the head or eyes.

Glaucoma: A disease of the eyes caused by an increase in the intraocular pressure which causes damage to the optic nerve and defects in the visual field.
Hyperopia: Hypermetropia, farsightedness; condition of the eye in which light rays from the distant objects are brought to focus behind the retina when the eye is at rest.

Hypertrophia: One eye deviated upward relative to the other.

Hyphema: Bleeding into the anterior chamber.

Iridectomy: Surgery in which a piece of the iris is removed. Can sometimes be done with a laser.

Iritis: Inflammation in the front of the eye (anterior chamber) causing pain, redness, and photophobia.

Lagophthalmos: Inadequate closure of the eyelids.

Monocular: Having only one seeing eye; pertaining to just one eye.

Myopia: Nearsightedness: A refractive error in which rays of light come to a focus in front of the retina as a result of eyeball being too long from front to back, or having excessive curvature of cornea or lens.

Nystagmus: An involuntary movement of the eyeballs from side to side, up and down, in a rotary motion, or mixed; may be fast or slow, with large or small amplitude.

Occipital Lobes: Area in the back of the brain on the right and left where vision is interpreted by the brain.

Occlusion: Act of blocking the vision of one eye, so as to force the use of the other eye. May be used in children with amblyopia to try to improve vision in the amblyopic eye.

Optic Atrophy: Relative or complete death of the optic nerve fibers characterized by pallor of the optic nerve head and accompanying visual loss.

Optic Nerve: Bundle of nerve fibers from the eye which connects the retina to the chiasm and ultimately the brain.

Orbit: Bony, inverted cone by which each eye is enclosed.

Peripheral Vision: All vision except the central portion seen by each eye. Ability to perceive presence, motion, or color of object outside the direct line of vision.

Phoria: A tendency toward crossed eyes, eye turning out or up. See esophoria, exophoria.

Posterior Chamber: Fluid-filled space behind the lens and in front of the retina.

Prism: Lenses of various strength that bend light rays and can be used to quantitate or correct misalignment of the eyes or double vision.

Ptosis/Blepharoptosis: A drooping of the upper lid.

Refractive Error: A defect in the eye’s ability to bring light rays to sharp focus on the retina. See myopia, hyperopia, astigmatism.

Retina: Back of the eye; made up of nerves which detect light, color, and motion, and transmits this information via the optic nerve to the brain.

Retinal Detachment: Separation of the retina from the underlying vascular or choroid layer of the eye which breaks connections between the rods and cones and the pigment layer; most often caused by a hole or a tear in the retina, traumatic or spontaneous.

Retinitis Pigmentosa: A form of hereditary degeneration of the retina which begins as night blindness, but which produces a gradual loss of vision that may become complete.
Scotoma: An abnormal blind spot in the field of vision surrounded by an area of normal vision.

Stereopsis: Depth perception.

Strabismus: Manifest deviation of the eyes so that they are not simultaneously directed to the same object. See esotropia, extropia, hypertropia.

Visual Acuity: Sharpness of vision; the eye's ability to identify letters or numbers, given as a fraction such as "20/20" to indicate that at 20 feet this eye saw what most eyes can see at 20 feet. The larger the denominator (lower number), the worse the visual acuity.

Vitreous Floaters: Condensation of debris in the vitreous, which tends to move with eye movement.

Vitreous Hemorrhage: Bleeding into the posterior chamber.

Vitreous Humor: Viscous fluid in the posterior chamber.