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Abbe value. *Anatomy.* Expresses the degree (from 1 to 100) of chromatic aberration created by an optical material; higher numbers indicate less aberration. (OPT)

abducens (ab-DU-senz). *Anatomy.* Sixth cranial nerve. Motor nerve that innervates the lateral rectus muscle, which enables the eye to rotate outward (away from the nose). Originates in the lower pons area of the brainstem; enters the orbit through the superior orbital fissure. (NEU, PED)

abducens palsy, lateral rectus palsy, sixth nerve palsy. *Disease.* Partial or total loss of function of the sixth (abducens) cranial nerve. The affected eye has a defective ability to turn out beyond the midline (abduct) and so deviates inward (esotropia). The deviation lessens when both eyes look away from the affected side, and the patient will adopt a head turn toward the affected side. (NEU)

abduct (ab-DUKT). *Function.* To move away from the midline. (NEU, PED) See also ADDUCT.

abduction (ab-DUK-shun). *Function.* Movement away from the midline, eg, outward rotation of an eye from the straight-ahead position. (NEU, PED) See also ADDUCTION.

abductor (ab-DUK-tur). *Anatomy.* Muscle that moves a part of the body away from the midline. In the eye, the abductor muscles move the eyeball outward (away from nose) from the straight-ahead position; the primary abductor is the lateral rectus. (NEU, PED)

aberrant regeneration (ab-EHR-unt). *Disease.* Abnormal regrowth of damaged nerve fibers along preexisting pathways; eg, after injury to the third cranial nerve, regenerated nerve fibers to the inferior rectus muscle may grow into the upper eyelid and cause it to rise (instead of lower) when the eye looks down. (NEU, PED) See also PSEUDO-VON GRAEFE SIGN.

aberration (ab-ur-AY-shun). *Anatomy.* Blurred or distorted image quality that results from inherent physical properties (shape, curvature, density) of an optical device (lens or prism). (OPT)

aberrometer

chromatic (kroh-MAT-ik): Distortion of an image into images with fuzzy and colored edges; occurs because different wavelengths of light are refracted to different extents.

spherical (SFER-uh-kul): Type of blur caused by light rays (from an object point) striking the lens periphery, where they are bent too much (overrefracted).

aberrometer, wavefront analyzer. *Instrument.* Device that permits study of the eye's image-forming quality and optical aberrations and their effect on visual acuity. Aids laser-controlled photorefractive surgery (PRK, LASIK) to create a more accurate optical correction. (OPT, REF)

abetalipoproteinemia (ay-BAY-tuh-LI-poh-PROH-teen-EE-mee-uh), **Bassen-Kornzweig syndrome.** *Disease.* Characterized by inability of the body to absorb fats (lipids), malformed red blood cells, progressive nervous system defects, and retinitis pigmentosa. Retinal changes resemble those in vitamin A deficiency (rod vision deteriorates before cone vision). Congenital; hereditary. (PED, RET)

ab externo. *Surgical technique.* Describes an incision that starts from the outside of the eye and moves toward the inside. (CAT, GLA)

ab interno. *Surgical technique.* Describes an incision that is made from the inside of the eye toward the outside. (GLA)

ablate (ab-LATE). *Surgical technique.* To remove or destroy tissue, as by radiation or photocoagulation. (COR, RET)

ablation (ab-LAY-shun). *Surgical technique.* Removal or destruction of tissue with x-ray radiation, light, or laser energy. (COR, RET) See also ABLATION ZONE, PHOTOABLATION.

ablation zone. *Surgical technique.* The area of corneal tissue that is removed by an excimer laser during photorefractive surgery. (COR, RET)

ablepharon (ay-BLEF-ur-ahn). *Pathology.* Absence of eyelids. (PED)

ABMD. See ANTERIOR BASEMENT MEMBRANE DYSTROPHY.

abnormal retinal correspondence. See ANOMALOUS RETINAL CORRESPONDENCE.

abrade. *Surgical technique.* To scrape or rub away a surface; chafe. (COR) See also ABRASION.

abrasion, corneal abrasion. *Disease.* Scraped area of corneal surface; accompanied by loss of superficial tissue (epithelium). (COR)

Acanthamoeba (ay-kan-thuh-MEE-buh). *Disease.* Single-cell organism (protozoan) found in soil and contaminated water. Can cause a severe corneal infection (keratitis) after improperly sterilized extended-wear contact lenses are worn. (COR)

AC/A ratio (accommodative convergence/accommodation ratio). *Function.* Numerical expression for the relationship between the amount both eyes simultaneously turn inward (converge) and the amount their lenses increase in power (accommodate). In individuals with normal eyes,