

GLOSSARY

INDEX

GLOSSARY

Accommodation: The adjustment of the eye for seeing at different distances, accomplished by changing the shape of the crystalline lens through action of the ciliary muscle.

Amaurosis fugax: Transient recurrent unilateral loss of vision.

Amblyopia ex anopsia: Uncorrectable blurred vision due to disuse of the eye with no organic defect.

Aniseikonia: A condition in which the image seen by one eye differs in size from that seen by the other.

Anisometropia: Difference in refractive error of the eyes, e.g., one eye hypermetropic and the other myopic.

Anophthalmos: Absence of a true eyeball.

Anterior chamber: Space filled with aqueous bounded anteriorly by the cornea and posteriorly by the iris.

Aphakia: Absence of the lens.

Aqueous: Clear, watery fluid that fills the anterior and posterior chambers.

Astigmatism: Refractive error which prevents the light rays from coming to a single focus on the retina because of different degrees of refraction in the various meridians of the cornea.

Binocular vision: The ability of a person's 2 eyes to focus on one object and to fuse the 2 images into one.

Blind spot: "Blank" area in the visual field, corresponding to the light rays that come to focus on the optic nerve.

Buphthalmos: Large eyeball in infantile glaucoma.

Canalculus: Small tear drainage tube in inner aspect of upper and lower lids leading from the puncta to the common canalculus and then to the tear sac.

Canthus: The angle at either end of the eyelid aperture; specified as outer and inner.

Cataract: A lens opacity.

Chalazion: Granulomatous inflammation of a meibomian gland.

Choroid: The vascular middle coat between the retina and sclera.

Ciliary body: Portion of the uveal tract between the iris and the choroid. It consists of ciliary processes and the ciliary muscle.

Cones and rods: Two kinds of retinal receptor cells. Cones are concerned with visual acuity and colour discrimination; rods are concerned with peripheral vision and vision under decreased illumination.

Conjunctiva: Mucous membrane which lines the posterior aspect of the eyelids and the anterior sclera.

Convergence: The process of directing the visual axes of the eyes to a near point.

Cornea: Transparent portion of the outer coat of the eyeball forming the anterior wall of the aqueous chamber.

Cycloplegic: A drug that temporarily puts the ciliary muscle at rest, paralyzes accommodation, and dilates the pupil.

Dacryocystitis: Infection of the lacrimal sac.

Ectropion: Turning out of the eyelid.

Emmetropia: Absence of refractive error.

Enophthalmos: Abnormal retrodisplacement of the eyeball.

Entropion: A turning inward of the eyelid.

Enucleation: Complete surgical removal of the eyeball.

Epiphora: Watering.

Esophoria: A tendency of the eyes to turn inward.

Esotropia: A manifest inward deviation of the eyes.

Exenteration: Removal of the entire contents of the orbit, including the eyeball and lids.

Exophoria: A tendency of the eyes to turn outward.

Exophthalmos: Abnormal protrusion of the eyeball.

Exotropia: A manifest outward deviation of one or both eyes.

Field of vision: The entire area which can be seen without shifting the gaze.

Floater: Small dark particles in the vitreous.

Fornix: The junction of the palpebral and bulbar conjunctivae.

Fovea: Small depression in the macula adapted for most acute vision.

Glaucoma: Abnormally increased intraocular pressure.

Gonioscopy: A technique of examining the anterior chamber angle, utilizing a corneal contact lens, magnifying device, and light source.

Hordeolum, external (sty): Infection of a lash follicle or the glands of Moll or Zeis.

Hordeolum, internal: Meibomian gland infection.

Hyperopia, hypermetropia (farsightedness): A refractive error in which the focal point of light rays from a distant object is behind the retina.

Hyperphoria: A tendency of the eyes to deviate upward.

Hypertropia: A manifest upward deviation of the eyes.

Injection: Congestion of conjunctival blood vessels.

Ishihara colour plates: A test for colour vision based on the ability to trace patterns in a series of multicoloured charts.

Keratoconus: Cone-shaped deformity of the cornea.

Lacrimal sac: The dilated area at the junction of the nasolacrimal duct and the canaliculi.

Limbus: Junction of the cornea and sclera.

Microphtalmos: Abnormal smallness of the eyeball.

Meiotic: A drug causing pupillary constriction.

Mydriatic: A drug causing pupillary dilation without affecting accommodation.

Myopia: A refractive error in which the focal point for light rays from a distant object is anterior to the retina.

Nystagmus: An involuntary, rapid movement of the eyeball.

Pannus: Infiltration of the cornea with blood vessels.

Photophobia: Abnormal sensitivity to and discomfort from light.

Posterior chamber: Space filled with aqueous anterior to the lens and posterior to the iris.

Presbyopia ("old sight"): Physiologically blurred near vision, commonly evident soon after age 40.

Pterygium: A triangular fold of tissue which extends from the conjunctiva over the cornea.

Ptosis: Drooping of the eyelid.

Retina: Innermost coat of the eye, formed of light-sensitive nerve elements.

Sclera: The white part of the eye, a tough covering which, with the cornea, forms the external coat of the eye.

Scotoma: A blind or partially blind area in the visual field.

Synechia: Adhesion of the iris to cornea (anterior synechia) or lens (posterior synechia).

Tonometer: An instrument for measuring intraocular pressure.

Uvea (uveal tract): The iris, ciliary body, and choroid.

Uveitis: Inflammation of one or all portions of the uveal tract.

Vitreous: Transparent, colourless mass of soft, gelatinous material filling the eyeball behind the lens.

Zonule: The numerous fine tissue strands which stretch from the ciliary processes to the lens equator (360°) and hold the lens in place.

INDEX

Abrasion, corneal 14, 135
Accommodation 38
Acquired Immune Deficiency Syndrome 95
Acetazolamide 53, 55
Acetylcholine 61
Adrenaline 55
Albinos 36, 71
Amblyopia 105
Amacrine cells 108
Angle, anterior chamber 34, 40
Angle recession 57
Angiography, fluorescein 79, 87
Angiod streaks 95
Annulus of Zinn 101
Anterior chamber 1
Anterior segment 2
Anticholinesterases 61
Aphakia 141
Aphakic spectacle correction 141
Arteriosclerosis 80
Aqueous humour 1, 9, 39, 40
Aqueous, plasmoid 39
Aqueous veins 9, 40
Arcus senilis 32
Astigmatism 140, 141
Atropine 61
A-V nipping 81, 86

Bipolar cells 66, 108
Blepharitis, seborrheic 19
Blepharitis, ulcerative 19
Blood dyscrasias 90
Blood-retinal barrier 79
Blow-out orbital fractures 138
Bowman's layer 4, 5
Branch vein occlusion 84
Bruch's membrane 70, 95
Buphthalmos 56
Burns, acid 16, 134, 135
Burns, alkali 17, 134, 135
Burns, chemical 16, 134, 135

Canalculus, lacrimal 11, 13
Carcinoma, basal cell 30, 127
Carcinoma, squamous cell 30, 31
Capsulotomy 51
Carbachol 61
Caruncle 7
Cataract 46
Cataract, congenital 49
Cataract, cortical 47
Cataract, drug-induced 49
Cataract, hypermature 47, 56

Cataract, intumescent 47, 56
Cataract, metabolic 48
Cataract, nuclear 46
Cataract, posterior subcapsular 47
Cataract, senile 48
Cataract, traumatic 49
Cataract, treatment of 49
Cataracts, complicata 48
Cataract extraction, extracapsular 51
Cataract extraction, intracapsular 51
Cavernous sinus thrombosis 103
Central retinal artery occlusion 82
Central retinal vein occlusion 83
Central serous retinopathy 98
Chalazion 20
Chemical burns 16, 133
Chemosis 134
Choline esters 61
Chloroquine keratopathy 33
Chloroquine maculopathy 98
Choriocapillaris 70
Chorioretinitis 93
Choroid 1, 69, 70
Choroidal blood flow 71
Choroidal tears 97
Chromatophores 71
Chymotrypsin 51
Cilia 10
Ciliary body 1, 34, 37
Ciliary flush 9, 23, 45
Ciliary injection 9, 23
Ciliary muscle 37
Collarette 34, 36
Coloboma 60
Coat's disease 90
Commotio retinae 97
Cones 66
Conjunctiva 7-11
Conjunctival blood vessels 8
Conjunctival substantia propria 8
Conjunctivitis 23-26
Contusion, ocular 137
Copper wiring 80
Cornea 1, 3
Corneal abrasion 14
Corneal disease 6, 9, 23, 26
Corneal dystrophy 32
Corneal foreign body 15, 135
Corneal infection 26
Corneal nerves 5
Corneal oedema 5
Corneal reflexes 106
Corneal stroma 4, 5
Corneal transparency 6
Corneal transplantation 6, 7, 32
Corneo-scleral lacerations 135
Cotton-wool spots 84, 86, 88
Cover/Uncover test 105

Crescent, choroidal 72
Crescent, scleral 72
Crescent, pigment 72
Cryotherapy 64
Crypts, iris 36
Cyclocryotherapy 60
Cyclopentolate 61
Cycloplegia 60
Cyst, Macular 99
Cyst, Meibomian 20

Dacryocystitis, acute 21
Dacryocystitis, chronic 22
Dacryocystorhinostomy 22
Defect, nerve fibre bundle 54
Dendritic ulcer 27
Dermoid cyst 28, 130
Descemet's membrane 4, 6, 40
Diamox 53, 59
Diplopia 116
Dislocation, lens 51
Drusen 94
Drusen, optic disc 74
Duct, nasolacrimal 11, 21
Dystrophia myotonica 48

Ectropion 31
Edinger-Westphal nuclei 111
Electro-oculogram 126
Electroretinogram 125
Endophthalmitis 91
Endothelium, corneal 4, 6
Entropion 31
Epiphora 21, 31
Episclera 3
Episcleral veins 40
Episcleritis 28
Epithelium, ciliary 38
Epithelium, corneal 4, 14
Epithelium, conjunctival 8
Epithelium, lens 42
Eserine 62
Esotropia 62
Exophthalmos 102
Exophthalmos, endocrine 103
Exophthalmos, malignant 104
Exposure keratitis 14, 32
Extraction, cataract 49
Extraocular muscles 101
Exudates, hard 86, 87
Eyelids 9

Fat emboli 97
Field defects 54, 64
Flare and cells 44

Flashes 63, 64
Floaters 63, 64
Fluorescein angiography 79, 87
Flush, ciliary 9, 23, 45
Foreign body, conjunctival 15, 134
Foreign body, corneal 15, 135
Foreign body, intraocular 16, 136
Foreign body, subtarsal 15
Fornix 7
Fovea centralis 67
Foveola 67
Frontal eye fields 66
Fuch's dystrophy 33
Fundus, albinotic 71
Fundus, normal 71
Fundus, tessellated 71
Fundus photography 79

Ganglion cells 66, 108
Gland, accessory lacrimal 11
Gland, lacrimal 11, 102, 103
Gland, Meibomian 10, 19
Gland of Krause 11
Gland of Moll 11
Gland of Wolfring 11
Gland of Zeis 11
Glaucoma 18, 23, 28, 41, 52, 59, 62, 73
Glaucoma, angle closure 23, 52
Glaucoma, congenital 56
Glaucoma, open angle 52, 54
Glaucoma, secondary 56
Goblet cells 8
Gonioscope 34
Gonioscopy 34
Gray line 10

Haemangiomas, lid 29, 30
Haemorrhage, subconjunctival 18, 134
Haemorrhage, vitreous 88
Herpes simplex keratitis 27
Herpes zoster ophthalmicus 20, 95
Homatropine 61
Homocystinuria 51
Hordeolum, external 20
Hordeolum, internal 20
Horner's syndrome 112, 122
Horizontal cells 108
Hutchinson's sign 21
Hypermetropia 52, 140
Hypertension, ocular 41
Hyphaema 18
Hypopyon 26

Indent 65
Inner segment, cone 68

Inner segment, rod 68
Internal limiting membrane 39
Internuclear ophthalmoplegia 120
Intraocular lens, anterior chamber 51
Intraocular lens, posterior chamber 51
Iodopsin 69
Iridectomy, peripheral 53
Iridocyclitis 23, 44, 60
Iridocyclitis, herpetic 21
Iridodialysis 34
Iris 1, 34-36
Iris bombé 46
Iris crypts 35
Iris freckles 59
Iris naevi 22, 59
Iritis, herpetic 27

Kaposi's sarcoma 95
Kayser-Fleischer ring 33
Keratic precipitates 45
Keratitis, bacterial 26
Keratitis, fungal 28
Keratitis, herpes simplex 26, 95
Keratitis, viral 27
Keratoacanthoma 30
Keratoconus 33
Keratopathy 32, 33
Keratopathy, band 33
Keratopathy, chloroquine 32, 33

Laceration, conjunctival 17, 134
Laceration, lid 13, 132
Laceration, scleral 17, 135
Lacrimal apparatus 11
Lacrimal apparatus, injuries of 139
Lamina cribrosa 1, 2
Lateral geniculate nucleus 66, 110
Lens 35, 41
Lens capsule 42, 51
Lens sutures 42
Lensectomy 51
Levator palpebrae superioris 11, 13
Lid margin 10
Lid retraction 32, 103
Lids 9, 10
Light reflex, direct 111
Light reflex, consensual 111
Low vision aids 142
Lysozyme 12

Macula 97
Macular degeneration, age-related 97
Macular degeneration, disciform 97
Maculopathy, Diabetic 87

Marfan's syndrome 51
Melanoma, malignant 96, 129
Meibomian gland carcinoma 127
Meibomian glands 10
Meibomianitis 19
Membrane, Bruch's 70, 95
Microaneurysms 87, 88
Muscle, ciliary 37
Muscle, inferior oblique 101
Muscle, iris dilator 35, 36, 112
Muscle, iris sphincter 34, 35, 3, 1116
Muscle, levator 11, 102
Muscle, Muller's 11, 102
Muscle, superior oblique 101
Muscles, extraocular 101
Muscle cone 101
Myelinated nerve fibres 72
Myopia 140
Mydriasis 60

Neuritis, retrobulbar 74
Neuroglia 109
Nystagmus, jerky 123
Nystagmus, latent 123
Nystagmus, miner's 122
Nystagmus, optokinetic 123
Nystagmus, pendular 122
Nystagmus, vestibular 123

Occlusion 108
Occlusion, branch vein 84
Occlusion, central retinal artery 82
Occlusion, central retinal vein 83
Ocular contusion 137
Oedema, corneal 53
Ophthalmia neonatorum 25, 26
Optic atrophy, congenital 76
Optic atrophy, primary 76
Optic atrophy, secondary 74, 76
Optic chiasm 66, 110
Optic cup 67
Optic disc 72-77
Optic nerve 66, 109
Optic nerve injuries 139
Optic neuritis 74
Optic neuropathy, anterior ischaemic 75
Optic radiation 66, 110
Optic tract 66
Optic vesicle 67
Ora serrata 35, 63
Orbicularis muscle 10
Orbit 101
Orbital cellulitis 102
Orbital fat 102
Orbital fractures 137
Orbital injuries 137, 138

Orbital tumours 129-131
Outer segment, cone 68
Outer segment, rod 68

Palsy, fourth nerve 118
Palsy, sixth nerve 119
Palsy, supranuclear 119
Palsy, third nerve 116
Pannus 25
Panuveitis 91
Pars plana 35
Pars planitis 93
Pars plicata 35
Papillitis 74
Papilloedema 73, 74
Papilloma 31
Parasympatholytic drugs 60
Parasympathomimetic drugs 61
Parinaud's syndrome 120
Pathways, pupillary 110-112
Phopholine iodide 62
Photocoagulation 89
Photophobia 45
Photopsia 63
Photoreceptors 68
Physostigmine 62
Pigment dispersion syndrome 57
Pigment epithelium, ciliary 38
Pigment epithelium, iris 35
Pigment epithelium, retinal 1, 69, 70
Pilocarpine 53, 55, 62
Pinguecula 31
Plica semilunaris 7
Posterior chamber 1
Posterior segment 2, 66
Presbyopia 38, 42, 140
Pressure, intraocular 40, 56
Pretectal nuclei 66, 110
Probing 22
Proptosis 102
Prostigmine 62
Pseudoexfoliation 57
Pseudopapilloedema 74
Pseudotumour 103
Pseudoxanthoma elasticum 95
Pterygium 31
Ptosis 116
Pupil, Adie's 121
Pupil, amaurotic 121
Pupil, Argyll Robertson 121
Pupil, hemianopic 121
Pupillary block 52
Pupillary pathways, lesions of 112

Relative spectacle magnification 141
Reflex, accommodative 112

Reflex, light 111
Refraction 140
Refractive index 3
Retina 67
Retinal detachment, exudative 65
Retinal detachment, rhegmatogenous 63-65, 70
Retinal detachment, tractional 65
Retinal haemorrhages 86
Retinal nerve fibre layer 66
Retinal neurones 1, 66
Retinal oedema 86, 87
Retinal photoreceptors 1, 66
Retinal pigment epithelium 1, 69, 70
Retinal tear 64, 97
Retinene 69
Retinitis pigmentosa 96, 128, 130
Retinoblastoma
Retino-choroiditis, acute 92
Retinopathy, advanced diabetic 87
Retinopathy, background diabetic 87, 88
Retinopathy, diabetic 87
Retinopathy, hypertensive 85, 87
Retinopathy, pre-proliferative diabetic 87
Retinopathy, proliferative diabetic 65, 87, 88
Retinopathy, sickle cell 90
Retinoscope 140
Retinoscopy 140
Rhabdomyosarcoma 103, 130
Rhodopsin 68, 69
Rods 66
Rubella 49
Rubeosis iridis 57, 59

Sac, lacrimal 11, 21
Schlemm's canal 34, 40
Sclera 1, 2
Scleral buckling 65
Scleral spur 35, 40
Scleritis 28
Sclerosis, nuclear 46
Schwalbe's line 40
Septum, orbital 102
Sheridan-Gardiner test 124
Silver wiring 81, 86
Snowballs 93
Snowbanking 93
Squint, convergent 106
Squint, divergent 106
Squint, treatment of 107
Staphyloma 3, 33
Steroid responder 57
Strabismus 105
Steropsis 107
Stroma, corneal 4, 5
Stroma, iris 35, 36
Sturge-Weber syndrome 30
Stye 20


Subarachnoid space 109
Substantia propria, conjunctival 8
Subtarsal foreign body 15
Superior colliculus 66, 110
Sympathetic ophthalmia 45
Synechia, anterior 17
Synechia, peripheral anterior 18, 46, 54
Synechia, posterior 46

Tarsal plate 10
Tarsorrhaphy 15
Thyroiditis 103
Tear film 11
Temporal arteritis 75
Timolol 55
Tonometry, applanation 41
Tonometry, indentation 40
Tonometry, Schiotz 41
Toxocara 93
Toxoplasmosis 92
Trabecular meshwork 40
Trabeculectomy 55
Trachoma 24
Transplantation, corneal 32
Trichiasis 19
Tropicamide 61
Tumours, ciliary body 59
Tumours, choroidal 65
Tumours, intraocular 57
Tumours, iris 59
Tumours, lid 127
Tumours, orbital 129

Ulcer, dendritic 27
Ultraviolet light 14
Uveitis, anterior 44-46, 57, 91
Uveitis, granulomatous 45
Uveitis, intermediate 91
Uveitis, non-granulomatous 45
Uveitis, posterior 91, 94, 96

Visual acuity, distance 124
Visual acuity, near 124
Visual association areas 66, 111
Visual cortex 66, 110
Visual cycle 69
Visual evoked response 126
Visual field, lesions affecting 114, 115
Vitamin A 68, 69
Vitrectomy 89
Vitreoretinal adhesions 63
Vitreous chamber 1, 63
Vitreous detachment, posterior 63
Vitreous haemorrhage 88
Vitritis 91

Vitreous humour 2, 63

Xanthelasma 30
Xerosis 8, 25

Zonules, lens 35, 37

ACKNOWLEDGEMENTS

I wish to acknowledge the help of the Department of Ophthalmology, University of Wisconsin, and Mr. Ian Strachan, University of Sheffield. I am grateful to Miss Rosemary Lynch for typing the manuscript.

D. B. Archer

I would like to thank my colleagues in the Department of Ophthalmology, Royal Victoria Hospital, Belfast for their assistance in the revision of this book and both Mrs. J. Gallagher and Mrs. L. Steer for the typing of the manuscript.

C. Myra L. Sloper
August 1991

