

# Index

Page numbers in italics refer to figures.

- abducens nerve (CN VI) 25, 32, 71  
acne rosacea 67 (Fig. 195)  
AIDS (acquired immune deficiency syndrome) 123, 124, 126  
albinism 158  
amblyopia 26, 30  
Amsler grid 44, 153, 171  
aneurysms 25, 31, 32, 49  
angle-closure glaucoma 49, 108–111, 117  
*see also* glaucoma  
angloid streaks 156, 158  
ankylosing spondylitis 126  
antibiotics 59  
arteries  
    carotid and cerebral 25, 41, 42, 48–50, 146  
    ophthalmic 25, 49, 71  
    retinal 142, 144, 146, 147, 149, 169  
    vertebral 25  
arthritis 4, 54, 96, 126–127  
asteroid hyalosis 162  
astigmatism 10  
Axenfeld nerve loops 78  
  
band keratopathy 118  
basal cell carcinoma 64  
Behcet's disease 116, 121, 126  
Bell's palsy 34  
blepharitis 52–54, 66–69  
blepharospasm 34  
blow-out fracture of orbit 74  
Botox injection 35  
Bowman's membrane 18, 76  
brain 25, 36, 46, 48–50, *inner back cover*  
Bruch's membrane 152  
  
carcinoma 64  
carotid and cerebral arteries *see* arteries,  
    carotid and cerebral
- carotid-cavernous fistula 49–50  
cataract 1, 125, 128–135  
cavernous sinus 25, 49–50  
    thrombosis 49–50  
central serous chorioretinopathy 156  
chalazion 69  
cholesterol 146, 169, 170  
choroid 111–113, 154–156  
choroiditis *see* uveitis, posterior  
ciliary body (processes and muscle) 97, 108, 112, 133, 136  
color vision 37, 47  
CT (computed tomography) scanning 3, 46, 71–74, 120, 141  
conjunctiva 89  
    chemosis (edema) 89  
    concretions 91  
    follicles 63, 93  
    hemorrhage 90  
conjunctivitis 45, 92, 116, 116 (Fig. 367), 117  
    allergic 94, 95  
    bacterial 93  
    blepharoconjunctivitis 93  
    inclusion 93  
    papillary and vernal 18, 92  
    trachoma 93  
    viral 94  
contact lens fitting 14–18  
cornea 18, 76–89  
    abrasion 18, 20 (Fig. 62), 21 (Fig. 64), 77, 78  
    arcus 170  
    edema 78, 83, 111  
    endothelium 76, 77, 82–85  
    epithelium 76–82  
    *in* refractive surgery 18–22, 133

- tomography 11, 22, 87  
transplantation 84–87  
ulceration 81, 82  
cotton-wool spots *outer front cover*, 144, 157  
cranial nerves  
  abducens nerve (CN VI) 25, 32, 71  
  oculomotor nerve (CN III) 25, 31, 71  
  trigeminal nerve (CN V) 24, 25, 33  
  trochlear nerve (CN IV) 23–25, 32, 71  
  vestibulocochlear nerve (CN VIII) 34  
cutaneous horn 65  
cyclitis *see uveitis, intermediate*  
cytomegalovirus 123, 125, 155 (Fig. 495)  
  
dacryocystitis 58  
dacryocystorhinostomy 58  
dermatochalasis 59  
dermoid tumor 89  
Descemet's membrane 76, 84–85  
diabetic retinopathy 3, 142–149, 166  
diplopia 2, 30, 31, 75  
Down's syndrome 88  
drusen  
  optic disk 137, 138, 138 (Fig. 437), 141, 141 (Figs 448 and 449)  
  retinal 141, 152, 157 (Fig. 504)  
dry eye disease (DED) (Schirmer and tear breakup time tests) 51–56  
  
ectropion 60  
Ehlers–Danlos syndrome 158  
endophthalmitis 135  
enophthalmos 72, 74–75  
entropion 60, 93  
enucleation 113, 125, 126  
epidermoid inclusion cyst 64  
epiphora 2, 56–58  
epiretinal membrane 163–164, 167  
episcleritis 96  
esophoria 26  
esotropia 26  
exophoria 26  
exophthalmos 3, 72–74  
exotropia 26  
eye muscles and movement 23, 24, 30, 71  
  
Fabry's disease 6 (Fig. 14)  
facial nerve 24, 34  
filamentary keratitis 79  
  
floater 1, 162, 165, 168  
fluorescein angiography 139, 153, 156  
fracture of orbit 74  
Fuchs' dystrophy 83  
fusion 27  
  
ganglion cells 36, 37  
giant cell arteritis 38, 39  
glaucoma 1, 29, 97–111  
  angle-closure 49, 108–111, 117  
  congenital 111  
  inflammatory 110, 116  
  open-angle 99  
  pigmentary 110  
  pseudoexfoliation 110  
  rubeosis iridis 115  
  Sturge–Weber syndrome 85, 111  
  traumatic iris recession 110, 111  
  treatment 104–110  
gonioscopy 99, 100  
Graves' disease 3, 60  
  
hallucination 2  
headache 2, 25, 72  
hemangioma 64  
herpes simplex keratitis 81, 123  
herpes zoster dermatitis (shingles) 33  
histoplasmosis 126  
Horner's syndrome 41–42  
hydroxychloroquine 4  
hyperopia (farsightedness) 9  
hypertensive retinopathy 142, 144  
hyphema 110  
hypopyon 82  
hypotropia (hypertropia) 26, 30, 32  
  
idiopathic intracranial hypertension 40, 141  
idiopathic orbital inflammatory syndrome 73, 74  
inferior ophthalmic vein 25, 49, 71  
inferior orbital fissure 71  
inferior rectus muscle 23–25, 71, 74  
infraorbital nerve 33, 75  
iritis and iridocyclitis *see uveitis, anterior*  
  
jaundice 97  
  
Kaposi's sarcoma 124  
keratitic precipitates 116, 117

- keratitis 79–81  
keratoacanthoma 64, 64 (Fig. 182)  
keratoconus 86–88  
keratometry 15  
kernicterus (jaundice) 97
- lacrimal system 51, 52, 120  
lagophthalmos 80  
LASIK surgery *see* refractive surgery,  
    LASIK  
lateral rectus muscle 32, 71, 73  
lens 128  
leprosy 65, 66  
levator palpebral muscle 23–25, 61, 62,  
    71  
lice on eyelashes 62  
lid cellulitis 69–73  
light sensitivity (photophobia) 2, 79, 115  
limbus 15, 18, 77, 78  
lymphangiectasia 91  
Lyme disease 96, 127  
lymph nodes 51, 94  
lymphoma leukemia 74, 127,  
    152 (Fig. 482), 168
- macula 136  
macular degeneration 152–156  
macular edema 115, 141, 143, 146, 148,  
    154  
macular hole 166–167  
macular pucker 164  
MRI (magnetic resonance imaging) 38,  
    48, 74  
Marcus Gunn pupil 37, 141  
medial rectus muscle 23, 24, 28, 30, 31  
meibomian glands 52, 53  
melanoma 95, 113, 114  
melanosis oculi 95, 110  
meningioma 39, 74  
migraine 2, 47  
molluscum contagiosum 63  
Muller's muscle 41  
multiple sclerosis 31, 37, 127  
muscles (extraocular) 23, 24, 28, 30  
myasthenia gravis 62  
myelinated nerve fibers 137, 138  
myokymia 34  
myopia (nearsightedness) 10,  
    97 (Fig. 296), 137
- nasolacrimal duct 51, 58  
near point of convergence 27  
nematodes (*Toxocara*, *Onchocerca*) 121,  
    122, 127  
neurofibromatosis 65, 66  
nevi 64, 95, 113  
nystagmus 35
- OCT (optical coherence  
    tomography) 140, 145–147, 149,  
    154, 159, 163, 167  
oculomotor nerve (CN III) 25, 31, 71  
ophthalmic artery and vein 25, 49, 71  
ophthalmoplegia 72  
ophthalmoscopy 138, 139  
optic atrophy 36, 147  
optic chiasm 25, 42, 46, 73  
optic disk (papilla) 36, 100–103, 137, 138  
optic disk drusen *see* drusen, optic disk  
optic nerve 36–40, 71, 73, 100, 103  
optic neuritis and neuropathy 4, 6,  
    37–39, 45  
optics 9–11  
ora serrata 136  
orbicularis oculi muscle 24, 34  
orbit 61, 71  
orbital cellulitis 73  
orbital fat 60, 61, 70  
orbital septum 70  
osteogenesis imperfecta 96
- papilledema 40, 140  
pars plana 108, 111, 112  
phacoemulsification 129, 131, 132  
phakomatoses 65–66  
photophobia (light sensitivity) 2,  
    79, 115  
pinguecula 90  
pituitary gland 25, 46, 132  
posterior cerebral artery *see* arteries,  
    carotid and cerebral  
presbyopia 11  
prism testing 28  
proptosis 3–4, 72, 74  
    *see also* exophthalmos  
pseudostrabismus 28  
pseudoxanthoma elasticum 156  
pterygium 90  
ptosis 61

- puncta 51, 52, 57  
pupil 5 (Fig. 9), 31, 41, 43  
  Adie's pupil 44  
  Argyll Robertson pupil 123
- reactive arthritis (formerly Reiter's syndrome) 118, 126, 127
- refraction 11
- refractive surgery  
  LASIK (laser in situ keratomileusis) 19–21  
  lens implants 21, 22  
  PRK (photorefractive keratectomy) 20, 21  
  see also *surgery*
- Reiter's syndrome *see* reactive arthritis
- retina 36, 136–168  
  retinal artery *see* arteries, retinal  
  retinal artery occlusion 140, 142, 169  
  retinal blood vessel disease 142  
  retinal detachment 149, 162 (Fig. 520)  
  retinal drusen *see* drusen, retinal  
  retinal exudates *outer front cover*, 148, 157, 169  
  retinal hemorrhages 144, 148–149, 151, 162  
  retinal hole 163–167  
  retinal vein occlusion 144–146  
  retinitis pigmentosa 158–160  
  retinoblastoma 160  
  retinopathy  
    diabetic 3, 142–149, 166  
    hypertensive 142, 144  
    of prematurity 161  
  rheumatoid arthritis 4, 96  
  rubeosis iridis 115
- sarcoidosis 96, 116, 119–121, 127
- sclera 96
- scleral staphyloma 97 (Fig. 296)
- scleritis 96
- scotoma 45–46
- seborrheic keratosis 63, 63 (Fig. 179)
- shingles 33
- sickle cell disease 143
- sinus cavities and sinusitis 2, 70, 71
- Sjögren's syndrome 54, 127
- slit lamp 76
- squamous cell carcinoma 64
- Stevens–Johnson syndrome 5, 54, 91
- strabismus 26–32
- stroke 47–49
- Sturge–Weber syndrome 65, 111
- sty 69
- superior oblique muscle 23, 24, 71
- superior ophthalmic vein 49, 71
- superior orbital fissure 71
- superior rectus muscle 23, 24, 71
- surgery  
  carotid endarterectomy 48–49, 169  
  cataract 128–135  
  corneal transplant 84–87  
  enucleation 124–126  
  epiretinal membrane 164  
  glaucoma 104–110  
  ptosis 61–62  
  retinal detachment 164–168  
  strabismus 28  
  tarsorrhaphy 34  
  vitrectomy 167–168  
  *see also* refractive surgery
- sympblepharon 5, 91–92
- sympathetic nerve 25, 41
- sympathetic ophthalmia 124
- syphilis 96, 123, 127
- systemic lupus erythematosus 4 (Fig. 4), 127
- tarsus 60, 61, 70
- tearing (epiphora) 2, 56–58
- thrombosis, cavernous sinus 49–50
- thyroid disease 3, 60
- tonometers 98, 99
- toxoplasmosis 121, 123, 127
- trabecular meshwork 97–100, 104, 107
- trachoma 93
- transient ischemic attack (ministroke) 25, 47, 48
- trauma  
  anterior uveitis 118  
  dislocated lens 134  
  hemorrhage, retinal and vitreous 162  
  hyphema 110  
  lid laceration 57, 60  
  open globe 18, 125  
  trichiasis 60 (Fig. 166), 62, 80
- trigeminal nerve (CN V) 24, 25, 33
- trigeminal neuralgia

trochlear nerve (CN IV) 23–25, 32, 71  
tuberculosis 127  
tuberous sclerosis 65

ultrasound 114, 141, 162  
uvea (iris, ciliary body and choroid) 41  
(Fig. 119), 111  
uveitis 115  
anterior (iritis) 115–119  
intermediate (cyclitis, vitritis)  
115, 119  
posterior (choroiditis) 115, 121, 162

VEGF (vascular endothelial growth factor) 143, 148, 150  
verucca (papilloma warts) 63, 91  
vertebral artery 25  
vertigo 34, 35

vestibulocochlear nerve (CN VIII) 34  
vision, color 37, 47  
vision testing (central) 8–14  
visual cortex *inner back cover*  
visual field testing (peripheral) 44–46,  
103, 141  
visual pathway 25, 36, 42, *inner back cover*  
vitamin A, 54, 141, 152  
vitrectomy 167–168  
vitreous 155, 161–168  
vitreous detachment 163  
vitreous hemorrhage 162

Wilson's disease 88  
Wirt stereopsis test 27

xanthelasma 170 (Fig. 548)

- 1 If patients complain of blurry vision in their right eye, ask them to cover the right eye. It may be temporal loss on the right side due to a lesion in the left brain posterior to the chiasm. If transient it is most often due to migraine or a ministroke (transient ischemic attack, TIA). Remind them to cover each eye when it occurs.
- 2 Fibers exit the optic track and go to the superior colliculus to form part of the pupillary light reflex arc, which accounts for the consensual constriction of both pupils when light is shone in either eye.