

Acute angle closure

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This usually occurs in older, often hypermetropic, patients. The prevalence is much higher in some Asian populations. The cornea becomes hazy, the pupil oval, dilated and non-reacting, the vision poor and the eye feels hard. In severe cases pain may be accompanied by vomiting and the condition can be mistaken for an acute abdominal problem. Tonometry (intraocular measurement) and examination of the iridocorneal angle by gonioscopy (using a prism placed on the cornea) is diagnostic. Urgent treatment to reduce the pressure with pilocarpine eyedrops, oral acetazolamide and, if refractory, mannitol should be started, followed by yttrium aluminium garnet (YAG) laser iridotomy, laser iridoplasty, anterior chamber paracentesis or surgical iridectomy. The condition is usually bilateral and the second eye usually needs a prophylactic iridotomy at the same time. Except for a simple conjunctivitis and subconjunctival haemorrhage, which are self-limiting, the management of an acute red eye requires expert treatment and a specialist opinion should be sought. A painful eye with a cranial nerve III palsy (ptosis, dilated pupil, globe down and out) often signifies an intracranial aneurysm and should be investigated immediately. This may occur in one or both eyes, and the visual loss may be transient or permanent. Possible causes are: /uni25CF Acute : /uni25CF obstruction of the central retinal artery (Figure 49.32); /uni25CF obstruction of the central retinal vein (Figure 49.33); - /uni25CF ischaemic optic neuropathy; /uni25CF migraine and other vascular causes; - /uni25CF vitreous and retinal haemorrhages; /uni25CF retinal detachment (Figure 49.34); - /uni25CF macular hole, cyst or haemorrhage; /uni25CF cystoid macular oedema, often after surgery; /uni25CF hysterical blindness. /uni25CF Chronic : /uni25CF cataract; /uni25CF glaucoma; /uni25CF macular degeneration. /uni25CF diabetic retinopathy .

Figure 49.31 Episcleritis. Figure 49.32 Retinal artery occlusion. Figure 49.33 Central retinal vein occlusion.

Specialist help should be sought in any case of loss of vision. The possibility of temporal arteritis should always be considered in the differential diagnosis of sudden visual loss, as prompt treatment of this condition is extremely important. Elderly patients with sudden visual loss should be specifically asked for symptoms of scalp tenderness and jaw claudication and temporal arteries should be palpated for pulsation and tenderness. The erythrocyte sedimentation rate and C-reactive protein should be measured immediately if temporal arteritis is suspected, and the carotid system should be examined for bruits and other signs of arteriosclerosis in cases of ischaemic optic neuropathy and central retinal artery occlusion. Glaucoma, hypertension, hyperviscosity syndromes and diabetes should be looked for in cases of central vein thrombosis.

Figure 49.34 B-scan of a retinal detachment.

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