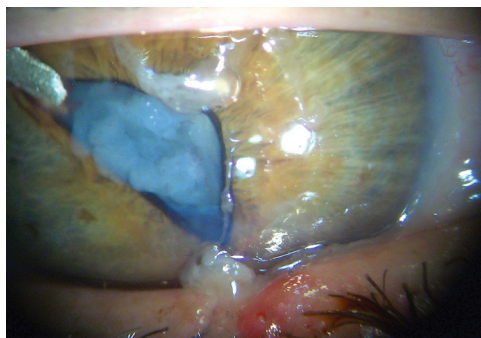


Figure 15-34 Penetrating metallic foreign body from rocket-propelled grenade, Craig Joint Theater hospital, Bagram Air Base, Afghanistan. Note iris incarceration at entrance wound at the limbus, anterior capsule laceration, and cortical fluffing of lens material within the pupil and metallic foreign body lodged in the angle superiorly. (Courtesy of Charles D. Reilly, MD.)



discoloration of the endothelium and deep stroma is visible. Removal of the foreign body can ameliorate the discoloration (Video 15-3). If left untreated, ocular siderosis can cause permanent damage to the retinal pigment epithelium and inner retinal layers and ultimately induce optic nerve atrophy.



VIDEO 15-3 Removal of metallic foreign body causing siderosis from angle.

Courtesy of Joseph D. Iuorno, MD.



Closure of iris lacerations may decrease the formation of anterior or posterior synechiae while reducing glare and polyopia from severe corectopia; however, it may be difficult to achieve during the primary procedure. Iridodialysis may cause monocular diplopia and an eccentric pupil if left untreated. If corneal opacity prevents safe repair of internal ocular injury, repairs can be performed secondarily. The McCannel technique and the Siepser knot are popular approaches for repair of an iris defect (Video 15-4; Fig 15-36).



VIDEO 15-4 Modified Siepser knot.

Courtesy of Michael E. Snyder, MD.



Prophylactic intraoperative antibiotics to cover both gram-positive and gram-negative organisms may be given by subconjunctival injection at the conclusion of the repair. Intravitreal antibiotics such as vancomycin 1 mg and ceftazidime 2.25 mg can be considered for contaminated wounds involving the vitreous.

Postoperative management

Postoperatively, therapy is directed at preventing infection, suppressing inflammation, controlling IOP, and relieving pain. Patients may be given intravenous antibiotics (eg, a cephalosporin and an aminoglycoside) for 48 hours or an oral antibiotic with good vitreous penetration, such as moxifloxacin 400 mg per day for 3–5 days. Topical antibiotics

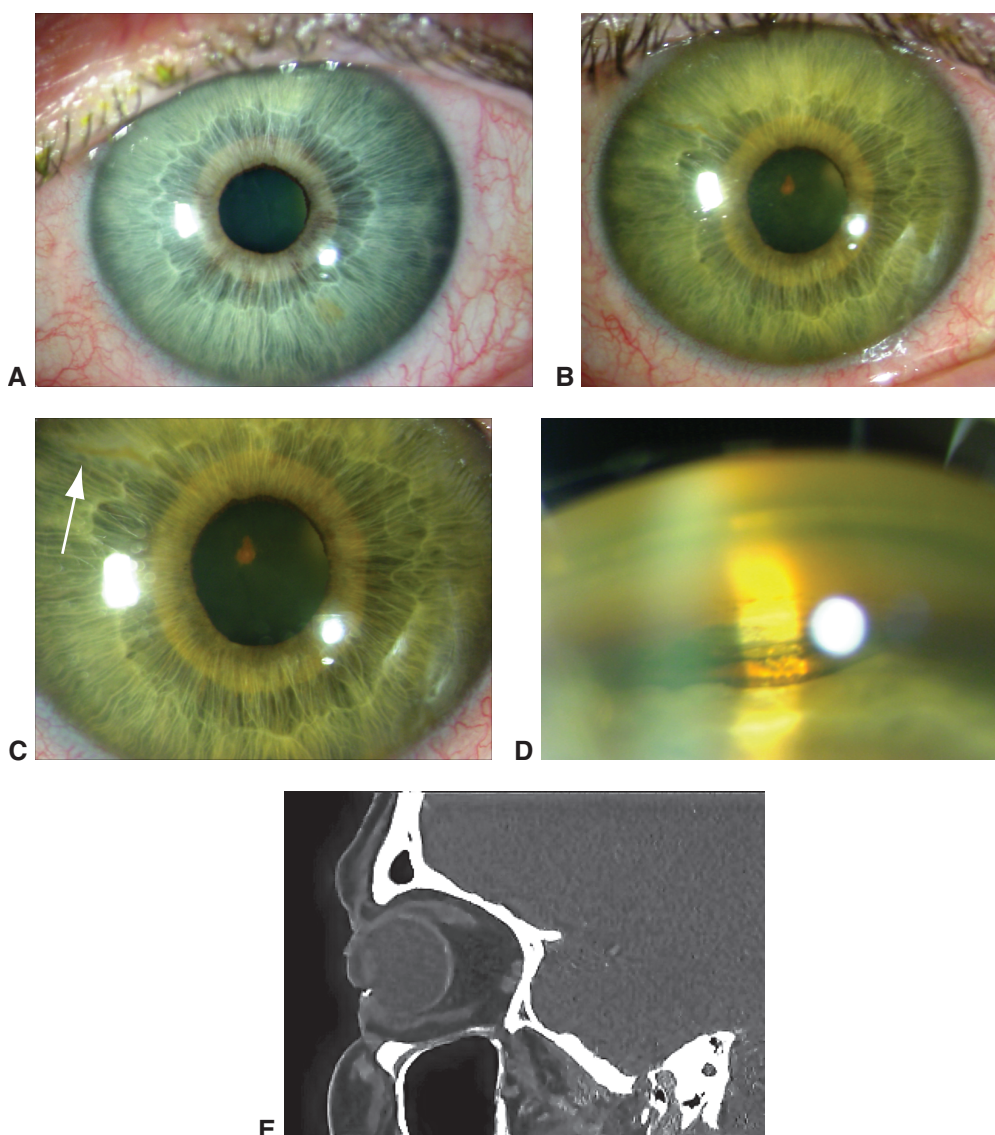


Figure 15-35 Retained intraocular foreign body. **A**, Normal fellow eye with blue iris. **B**, Siderosis causes yellow discoloration of iris and endothelium. **C**, Note entry wound (*arrow*) and pigment on the crystalline lens, likely representing the ricochet site of the projectile. **D**, Goniocopy reveals foreign body in inferior angle. **E**, Visualization of angle with computed tomography imaging. (Courtesy of Joseph D. Iuorno, MD.)

are generally instilled 4 times a day for 7 days or until epithelial closure of the ocular surface is complete. Topical corticosteroids may be given 4–8 times a day, depending on the amount of inflammation or the risk of infection. Corticosteroid eyedrops and cycloplegics are slowly tapered as the inflammation subsides. A fibrinous response in the anterior chamber may respond well to a short course of systemic prednisone. IOP should