Figure 4.11 Evisceration with intraocular prosthesis. In this technique all of the intraocular tissues are removed, and a silicone or methyl methacrylate sphere is introduced into the globe consisting of only the cornea and sclera.

(a) A 5–10 mm lateral canthotomy is performed by strabismus or Steven's tenotomy scissors to increase the size of the palpebral fissure and facilitate surgical exposure.

(b) After incision of the bulbar conjunctiva and Tenon’s capsule 4–6 mm from the limbus by tenotomy scissors, the sclera is incised with a Beaver No 64 blade for approximately 140 to 180°. Incision of the sclera results in variable amounts of hemorrhage which are controlled by point cautery.

(c) A lens loop (or blunt spatula) is inserted into the sub scleral space, or between the sclera and the anterior and posterior uveal tracts. All of the intraocular tissues are gently separated from the sclera. Hemorrhage is to be expected.

(d) With gentle traction, the iris, ciliary body, lens, vitreous, and retina are retracted from the anterior globe. The shell consisting of the cornea and sclera is gently flushed with sterile saline to remove any remaining intraocular tissues and hemorrhage.

(e) The Carter sphere holder and inserter. A yellow sphere is held by the instrument’s tips and is usually used for eviscerations in the cat. A black sphere is recommended for the dog.

(f) With the Carter sphere holder and inserter, a premeasured sterile sphere (the diameter is usually 1 mm less than the horizontal corneal diameter) is placed into the fibrous tunic shell.

(g) Operative appearance of the Carter sphere holder and inserter for evisceration in a cat. During the insertion of the sphere into the globe, the instrument inserts the sphere while retracting the edges of the scleral wound.

(h) The two layers of closure consist of apposition of the scleral and the bulbar conjunctival wounds with simple interrupted absorbable sutures.