

PROCEDURE

After appropriate preparation (shaving off hair & aseptic prep of the eye) and thorough nasolacrimal duct lavage, the eyelids are sutured together using a continuous suture. A circumferential incision 1.5 cm away from the eyelid margin is made through the skin into the subcutaneous tissues of the eyelid but not through the conjunctiva. The lateral and medial canthal ligaments securing the eyelids to the orbit bones are transected. As traction is applied to the freed eyelids, dissection is continued caudally toward the orbit rim taking care to stay external to the conjunctival sac, which should remain closed. Close to the orbit rim the deep fascia forming the orbital septum is penetrated, and the extraocular muscles and tissues within the orbital cone can be visualized.

As each muscle is encountered, one blade of a Metzenbaum scissor is inserted between the muscle and sclera, and the scissor is pulled anterior toward the limbus before cutting, thus ensuring that the transaction occurs through muscle tendons, which bleed much less than the muscle belly. The dorsal and ventral oblique muscle insert deep to each respective rectus muscle and may have very short tendons of insertion. They are transected close to the sclera. After rectus and oblique muscle transection, the globe is grasped, and gentle traction is applied, thus making the retractor muscles that form a cone around the optic nerve easier to visualize. Traction on the globe should be minimal to decrease vagal nerve stimulation and avoid potential damage to the optic chiasm. With gentle medial traction on the globe, the surgeon should attempt to “strum” the optic nerve retractor muscle cone using an approach from the dorsolateral side of the orbit. Once the location of the nerve has been confirmed, the same hand is used to position the blades of a large curved serrated utility scissor around the cone. The cone is rarely visualized directly because of variable amounts of orbital fat and hemorrhage; therefore digital palpation is important. One or two cuts of properly placed scissors will almost completely free the globe. It is held in one hand, and the remaining medial attachments severed. The entire third eyelid should be removed at this time.

To prevent postoperative lacrimocele formation, it is recommended the lacrimal gland located in the periorbita of the dorsolateral orbit ventral to the orbit rim be surgically removed as well. All extraocular eye muscles are removed along with a substantial portion of the optic nerve (Figure 13-18B). The orbit is packed with sponges and pressure is applied as closure commences, but all sponges are removed before the subcutaneous tissues are completely closed. A drain may be necessary for 48 to 72 hours. Skin is closed routinely. A pressure bandage is applied for 24 hours and the pressure of the sutured incision combined with the bandage will almost always be adequate to stop hemorrhage. Antibiotics should be given for 5 to 7 days after surgery.

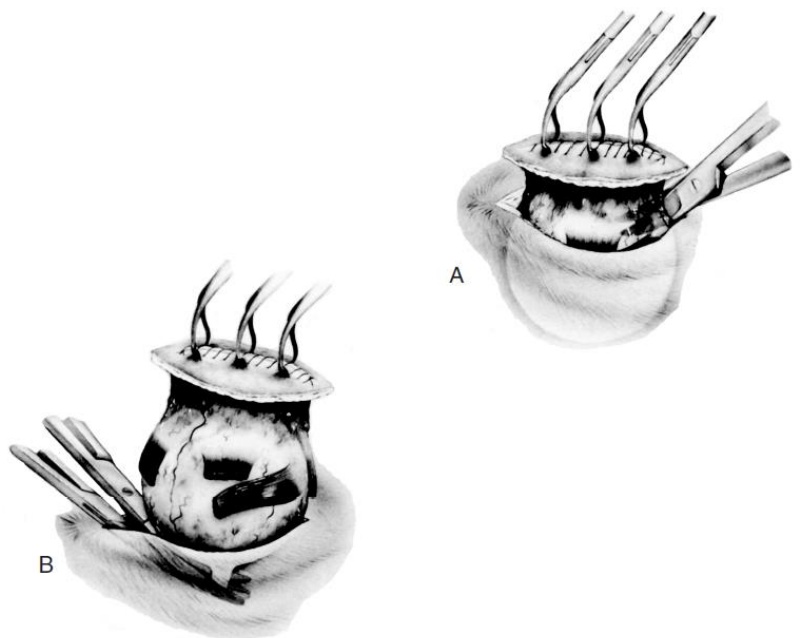


Figure 13-18 A, A periocular incision is made and dissection performed outside the extraocular muscles to the orbital apex. B, The optic nerve and associated vessels are clamped, ligated, and transected.

(Reprinted with permission from Slatter D: *Fundamentals in veterinary ophthalmology*, ed 3, Philadelphia, 2001, WB Saunders.)