***EVISERATION OF THE EYE***

This surgery is usually reserved for those select cases where enucleation might ordinarily be recommended but where the owner desires a better cosmetic result. In general, prostheses are placed to benefit the owner or the public, who may prefer the presence and appearance of a gray-white “eye” to an empty orbit. When the surgical site has healed, the patient appears to still have an eye present, lids that still blink, and a globe that still moves but is blind.

After a routine clip, prep, and nasolacrimal lavage, an eyelid speculum is placed or stay sutures or hand-held retractors are used to retract the eyelids. Stay sutures of 4-0 silk are placed at 3 and 9 o’clock in the limbus, with care taken so that they do not penetrate the globe. The dorsal conjunctiva is sharply incised dorsally at the 12 o’clock position anterior to the equator and approximately 0.5 to 1.5 cm from the limbus (increasing the distance from the limbus according to the size of the globe). The conjunctival incision parallels the limbus and is continued from the 12 o’clock to the 2:30 o’clock and 9:30 o’clock positions on the globe so the final incision encompasses 140 or more degrees. The sclera is incised in a similar manner, using a #11 blade followed by Metzenbaum scissors or with thermocautery. Care must be taken to avoid transecting any rectus muscles or a globe with strabismus will be the final result. Care should also be taken to avoid carrying this incision to the 3 o’clock and 9 o’clock positions, as critical vascular structures are present there. As soon as the sclera is incised, vitreous and aqueous humours will exit the wound, thus collapsing the globe. Hemorrhage will increase and can be suctioned or sterile gauze used to absorb the blood. If care is taken at this point to incise only sclera and not the underlying choroid, bleeding will be less. Suction and pinpoint cautery can be used as needed for hemostasis.

A small blunt spatula, such as a lens or cyclodialysis spatula, is inserted between the sclera and choroid and directed forward to carefully separate the choroid from its scleral attachments in the area of the iridocorneal angle, again avoiding any corneal touch. The choroid is then bluntly separated from the sclera and from the region of the optic nerve. If the choroid is not removed with suction, two-tissue forceps can be used to grasp and remove the choroid from the eye in a hand-over-hand manner. The choroid may tear during removal, with remnants inside remaining attached to the sclera. These will continue to bleed and should be removed as completely as possible using suction and blunt dissection. A silicon ball implant is then placed inside the corneoscleral shell. The implant size should be determined preoperatively and several sizes made available before surgery. According to Severin’s guidelines, the implants available should be within 1 to 2 mm of the horizontal diameter of the cornea of the normal eye. If neither eye is normal, measuring the normal eyes of an animal of the same species can provide an approximation. The preferred implants are black silicon balls, which should be thoroughly cleansed, sterilized, and rinsed again before placement. Implants less than 30 mm in diameter can be introduced via a Carter Sphere Introducer. Larger implants require placement of four to six stay sutures around the wound margins. These are used to elevate the cut edges of the sclera up, out, and over the ball as the ball is pushed gently through the wound. The sclera is closed with 4-0 to 6-0 synthetic absorbable sutures in a simple interrupted pattern; suture size varies according to the size of the globe and patient. The sclera is oversewn with the same suture in a simple continuous pattern. The dorsal rectus muscle should be inspected, and if it has been severed, it should be re-apposed using 6-0 synthetic absorbable sutures. The conjunctiva is closed with 5-0 to 6-0 suture in a simple continuous pattern. A temporary tarsorrhaphy is placed in the lids as described previously.