

Enucleation (Eyeball Removal)



Did you know...

Enucleation is defined as the removal of the globe, nictitating membrane, eyelids and conjunctiva (depending on the technique).



It is the most common orbital surgical procedure performed by veterinary ophthalmologists and veterinarians.

VetTechPrep



Enucleation is the removal of an eye. It is an irreversible method of treating various disorders of the eye. Reasons for enucleation include:

- Severe untreatable trauma, such as a perforated or ruptured eyeball.
- Uncontrollable glaucoma
- Infections or inflammation on the surface or w/in the eye that are unresponsive to therapy.
- Cancer of the eye
- Congenital deformities of the eye
- Diseases behind the eye, w/in the orbit.
- Diseases w/in the eye that have the potential to spread to the rest of the body.

Enucleation is also reserved as a last option to alleviate the pain associated with any eye problem, especially if the eye is blind & of no use to the patient. Enucleation & blindness are tolerated well by dogs & cats.

Veterinary Care

- Prior to enucleation, all medical attempts at saving the eye are usually tried.
- With the advances that have taken place over the last 20 years in veterinary ophthalmology, it is now possible to treat successfully many eye diseases that were NOT treatable before, & in many cases to save the animal's vision.
- When cancer is diagnosed in or around the eye, when an eye is blind & persistently painful, or when the cost of treating the eye is too expensive for the owner, enucleation may be chosen as the initial treatment.

Pre-Operative Tests:

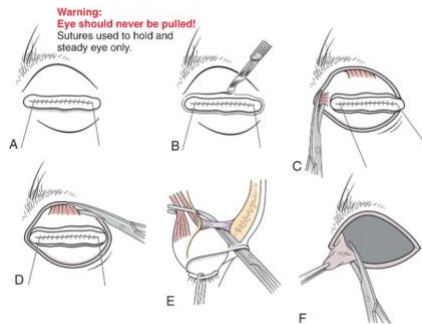
Type of Anesthesia:

- Pre-operative tests depend in part on the age & general health of the animal as well as the cause for the enucleation.
- Often a complete blood count, serum biochemical test, a urinalysis & possibly an EKG will be performed prior to surgery.
- General anesthesia is needed to induce unconsciousness, complete control of pain, & muscle relaxation.
- In the usual case, the pet will receive a pre-anesthetic sedative-analgesic drug to help him relax, a brief IV anesthetic to allow placement of a breathing endotracheal tube (e-tube) in the windpipe & subsequently inhalation (gas) anesthesia in oxygen during the actual surgery.

Surgical Procedure:

There are 2 surgical options for enucleation:

- Removal of all the tissues w/in the eye socket, including muscle & other tissues, is called an exenteration. This procedure is used primarily for the removal of a cancerous eye mass.
- Removal of the eyeball without taking all the surrounding tissue is referred to as an enucleation & is the most commonly performed procedure.
- After removal of the eye, the eyelid edges are permanently sutured closed.
- In some instances, a silicone or plastic sphere is inserted into the eye socket (orbit) before the skin is sewn closed. This is done to prevent the skin of the face from sinking into the orbit. It is only performed if there is no chance that infection or cancer was present in the eye or the orbit.
- Once the hair grows back in the area, the appearance of the dog is usually quite good



Ask about our surgical veterinary silicone ocular sphere implant as an add on option. This option will give your pet a improve cosmetic & a non-sunken eyelid closure appearance. Please be aware the only drawn back or complications with these inert silicone implants is that there is a slim chance that the body's eye orbit may reject it &/or possible infection may occur. If these complications do arise then we will need to perform another surgical procedure to remove the implant. In general, most pets' eye orbit/body tolerate the implant overall well for the life of the patient.



Veterinary Silicone Sphere Implants

Veterinary Ocular Implants – orbital implants that can be used in enucleation and evisceration surgery.



Risks & Complications - Post-Operative Care:

- The procedure takes about 45 minutes to 1.5 hours to perform in most cases, including the needed time for preparation & anesthesia.
- The overall risk of this surgery is low. The major risks are those of general anesthesia, bleeding (hemorrhage), postoperative infection & wound breakdown (dehiscence) over the incision.
- Overall complication rate is low, but serious complications can result in anesthetic death or the need for additional surgery.
- After surgery, the incision (suture site) must be protected until healing is complete.
- The dog may be sent home wearing an Elizabethan collar (e-collar) to prevent rubbing or traumatizing the surgery site.
- Oral antibiotics may be prescribed if the eye or orbit was infected at the time of surgery. If the animal is painful after the surgery, pain medication may be prescribed for a few days.
- There is usually some mild post-operative swelling at the site of the surgery, & if the eye was inflamed prior to surgery, then some bruising may also be noted in the area.
- If the dog allows it & takes comfort from it, warm wet compresses may be applied to the surgery site twice to three daily for 5-10 minutes.
- Occasionally, the dog may have a little bloody discharge from the nostril on the same side as the surgery. These signs usually resolve w/in 2 to 4 days.
The sutures are typically removed in 10 to 14 days.
- Carefully monitor your pet after the surgery. If there is any sign of persistent swelling, if there is any oozing from the stitches, if the animal acts as if he is NOT feeling well, then notify your vet. Most animals are fully recovered from the surgery & are acting normal w/in 48 to 72 hours.
- Animals with one eye enucleated do not seem to be handicapped w/ respect to their vision, their mobility or their ability to function.
Animals with one eye usually behave in a completely normal fashion.

POST-ENUCLEATION INSTRUCTIONS

Your pet has undergone surgery to remove an eye & is now being discharged for continued care at your home. Your job during the recovery period at home is just as important as the surgical procedure. As part of your pet's post-operative care, we recommend you closely adhere to the following instructions.

ACTIVITY RESTRICTION

Your pet needs to have their activity restricted for the following 10-14 days. Activity restriction includes no off leash running, playing & jumping. Time spent indoors should be restricted to crate rest & decreased activity. If you are having a difficult time keeping your pet calm & quiet, please let us know so that the doctor may prescribe medications/mild sedatives for them.

ELIZABETHAN-COLLAR (E-Collar)

It is also imperative that they do NOT lick at their incision for the following 10-14 days. An Elizabethan collar (cone, lamp shade, etc) should be applied to your pet to keep them from pawing/rubbing at the incision.

INCISION MONITORING

Monitor the incision daily for any severe redness, discharge or swelling. Mild swelling & redness are normal & part of the healing process. You can apply an ice pack to the incision 2-3 times daily for 5-10 minute intervals. If you notice that your pet is lethargic or inappetent, please contact your primary care veterinary team.

FEEDING

Whenever you get one, you should offer your pet 1/4 to 1/2 of their normal amount of food & a small amount of water. If your pet does NOT vomit w/in 30 minutes, they may have the rest of their normal meal & dinner again that night. If your pet does vomit, they may just be a little nauseous from the anesthesia so do NOT offer any more food or water for another 2-3 hours. By the morning after surgery, we expect them to have eaten the equivalent of 1 meal. You may have to entice your pet's appetite by offering high value foods/treats (ie toast, cheese, hot dog, boil chicken, rice, etc) to encourage their appetite. If 24 hours after bringing your pet home from surgery they are still NOT eating, please contact your primary vet.

PAIN CONTROL

Your pet will be sent home w/ any necessary medications to help w/ pain & inflammation post-op. They will likely start the day following the procedure. Please refer to your pet's pill vials for more detailed medication instructions.

FOLLOW-UP

Your pet needs to be seen back in 10-14 days to recheck the incision & remove sutures.

If you have any questions, please feel free to contact us using the information below.

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