

Middle Ear Disease: Ventral Bulla Osteotomy

Surgery Service



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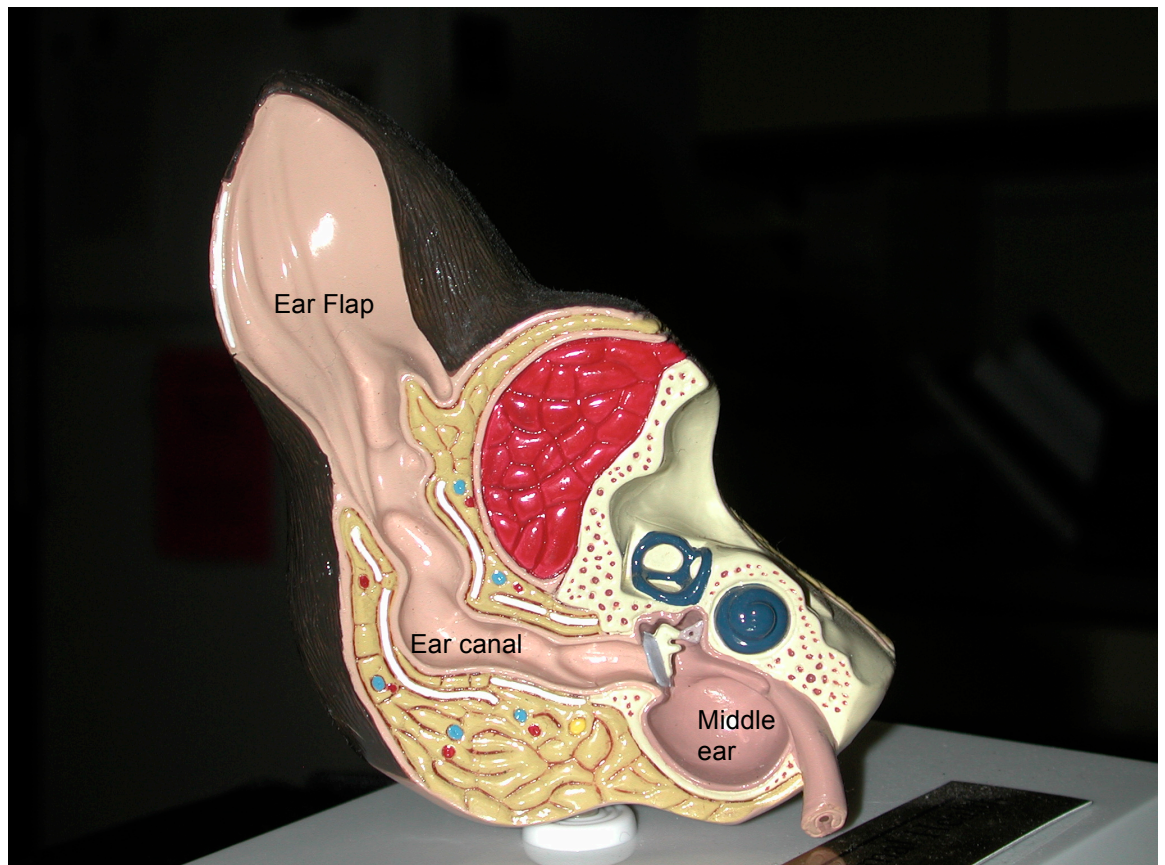
29080 Inkster Rd.
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Middle ear diseases

A number of conditions that may affect the middle ear and require surgery include inflammatory polyps, cancer, infection, and foreign bodies. The inflammatory polyp is the most common surgical disease in cats. The cause of this condition is unknown, but may be associated with chronic recurrent upper respiratory infections. Feline leukemia virus or Feline Immunodeficiency virus infection may suppress the immune system, resulting in chronic infection that leads to polyp formation. Ear polyps are usually found in the younger cats, whereas malignant tumors are more common in older cats. A polyp starts growing in the middle ear cavity and with time ruptures the eardrum, and then continues to grow into the ear canal. Some inflammatory polyps will grow through the Eustachian tube (auditory tube) and appear as a mass in the back of the throat.

Anatomy

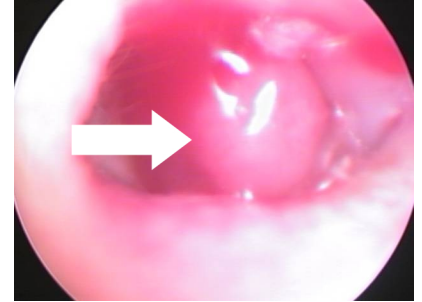
The ear canal is a long tube that originates at the base of the earflap and extends to the eardrum to form the external ear. The middle ear is a hollow cavity (bulla) within the skull that is separated by the eardrum and contains three fine bones that transmit sound to the inner ear. The balance organ and a hearing organ that changes sound into electrical signals are located in the inner ear. The sympathetic nerves are located within the middle ear. The auditory tube runs from the middle ear to the throat.



Ventral Bulla Osteotomy Continued...

Signs and diagnosis

Signs of middle ear disease include shaking of the head, scratching the ear, rubbing the ear, sensitivity when the ear is touched, foul odor from the ear, and bloody or yellow/green discharge in the ear canal. If the infection extends into the inner ear, your companion may keep the head in a tilted position, may have continual shifting of the eyes, or walk in circles. Polyps that are in the throat may result in breathing difficulty.



Your veterinarian will examine the ear with an otoscope to diagnose an inflammatory polyp. The throat will be examined, as the polyp may grow down the auditory tube. A complete blood count, feline leukemia, feline AIDS, chemistry profile and urine testing are performed prior to surgery. Radiographs of the middle ear may show a thickening of this structure

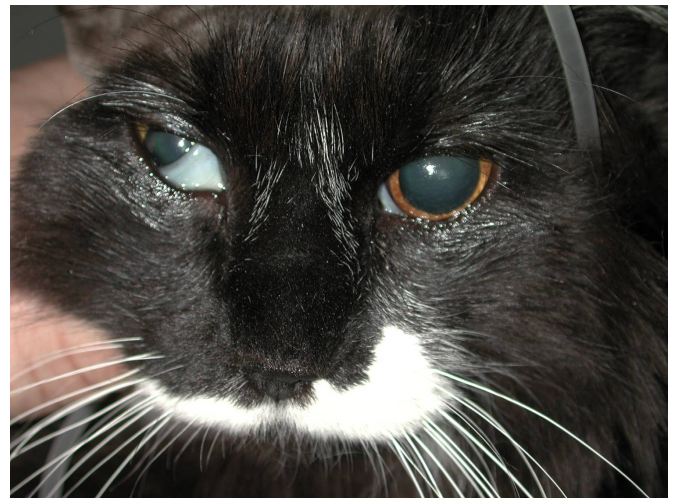
The day of surgery

Our anesthesia and surgical team will prescribe a pain management program, both during and after surgery that will keep your companion comfortable. This will include a combination of general anesthesia, injectable analgesics and oral analgesics.

Treatment

Inflammatory polyps can be removed by grasping the mass with a pair of forceps and gently pulling out until it is released from the tissues of the middle ear. This type of surgery can be done only if the polyp has grown up into the ear canal or is visible in the back of the throat. If the polyp cannot be removed by this simple method, a ventral bulla osteotomy is required to remove the mass from the middle ear. In addition, if the polyp has recurred following simple extraction, bulla osteotomy is recommended.

During the ventral bulla osteotomy procedure, an incision is made on the under side of the neck, just behind the jawbone. The muscles are separated to expose the bulla. The bone of the floor of the bulla is removed to expose and remove the polyp.



Aftercare and results

After surgery, you can continue to give your pet a prescribed pain reliever to minimize discomfort. Topical and oral antibiotics and steroids will be prescribed for a period of one month after surgery. It's also important to limit your cat's activity for two weeks after surgery. The surgeon will monitor the healing process with a follow-up examination at 2 and 6 weeks after surgery.

About 80% of the cats that have a polyp removed via ventral bulla osteotomy will develop Horner's syndrome. Signs of this include mild drooping of the upper eyelid, prolapse of the third eyelid (a membrane that crosses the eye) and constriction of the pupil. This problem may be permanent, but usually resolves within 1 month after surgery. The polyp will recur 50% of the time when it is removed via manual extraction through the oral cavity or ear canal, but will

Ventral Bulla Osteotomy Continued...

infrequently recur following bulla osteotomy. Other rare complications from surgery include vestibular syndrome (balance problems) and infection.

Assessment and recommendations

Patient: _____ Date: _____

Treatment

- Surgery is recommended
- Surgery is not recommended – please consult with our dermatologist

The following has been prescribed

- No medications or special diet are necessary at this time
- Diet: _____
- Topical ear medication: _____
- Oral medication: _____
- Other medication: _____

Exercise:

- Unlimited
- Confine your pet to the house other than very short leash walk necessary for bowel movements and urination
- Restrict exercise to leash walks 10 minutes twice daily

Preparation for surgery

- Start fasting your companion at midnight before the surgery; water should not be withheld
- Pepcid AC 10 mg tablets: give _____ tablet(s) with water (use a syringe if needed) at 6 AM on the day of surgery

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