



Total Ear Canal Ablation (TECA) and Lateral Bulla Osteotomy (LBO)

Indications:

A total ear canal ablation-lateral bulla osteotomy (TECA-LBO) is indicated in animals with chronic external and middle ear infections that have failed to respond to medical therapy, in cases where severe calcification of the ear canal cartilage is present, or if thickening of the epithelium within the ear canal creates a significant narrowing of lumen of the external ear canal. Additionally, this procedure may be indicated to treat masses or cancers of the external and middle ear.

Procedure:

A total ear canal ablation involves the removal of the vertical and horizontal portions of the ear canal. In almost all situations, this procedure is accompanied by a lateral bulla osteotomy, which involves the exposure of the middle ear (tympanic cavity) in order to remove debris and tissue. This allows for drainage and helps to prevent complications associated with ear canal removal. In cases of middle ear disease without involvement of the external ear canal, the surgeon may choose to perform a ventral bulla osteotomy alone.

Preoperative workup and other diagnostics:

- General physical examination with otoscopic evaluation of the ear canal
- Preoperative laboratory work (CBC, chemistry profile, urinalysis, thyroid function testing)
- Dermatology consultation (in certain instances) if not prior seen by the dermatology service
- CT Scan of the head
- Chest x-rays/Abdominal ultrasound (in cases of ear masses or suspected cancer)
- Culture middle ear contents – most commonly taken at time of surgery
- Histopathology of the external ear canal and contents of the middle ear after surgical removal

Complications:

As with any surgical procedure, there are always risks associated with general anesthesia. For otherwise healthy pets, these risks are usually low, but are considered increased in animals with systemic illness.

Several important structures are located in and around the middle and external ear. As a result, the potential complications of a TECA-LBO include:

- Facial nerve paresis/paralysis (temporary in most cases, but may be permanent)
- Horner's Syndrome (temporary in most cases, but may be permanent) – more common in cats
- Vestibular signs such as head tilt, nystagmus, nausea, vomiting (temporary in most cases, but may be permanent) – more common in cats
- Hemorrhage
- Incisional dehiscence or infection



- Failure of erect ears to stand normally
- Development of a fistula – this can happen one or more years after surgery. If this happens, a second surgery to look for, and remove the nidus is indicated.

Your surgeon will discuss these complications in more detail during your pet's visit.

Postoperative Care:

In hospital care:

Because a TECA-LBO may be associated with some significant discomfort, your pet will likely spend 2 to 3 days in the hospital following surgery. During this time, we will be able to provide intravenous pain medication, fluids and antibiotics.

At home care:

After your pet leaves the hospital we will have you continue to administer oral pain medications and antibiotics. Antibiotics are generally continued for 2-4 weeks depending on the particular condition. The specific type of antibiotic may need to be changed pending the results of the culture obtained at surgery.

Some animals may experience swelling around the ear following surgery. If this occurs, you will be instructed to apply either ice or a warm compress depending on the circumstances. Prior to this you will be asked to monitor your pet's incision for any signs of swelling, redness, discharge or pain.

Animals suffering from chronic middle and external ear infections often have some degree of concurrent skin disease such as seborrhea or allergies (food or environmental). It is usually necessary to continue to manage these conditions as previously instructed by your referring veterinarian. Additionally, in some cases it is necessary to continue to treat the skin of the ear with topical medications as some conditions may continue to manifest in these areas even after the removal of the ear canal.

Prognosis

Pets that have chronic ear disease generally feel better after recovery from their surgery.