



## End-Stage Ear Infections in Dogs & Cats

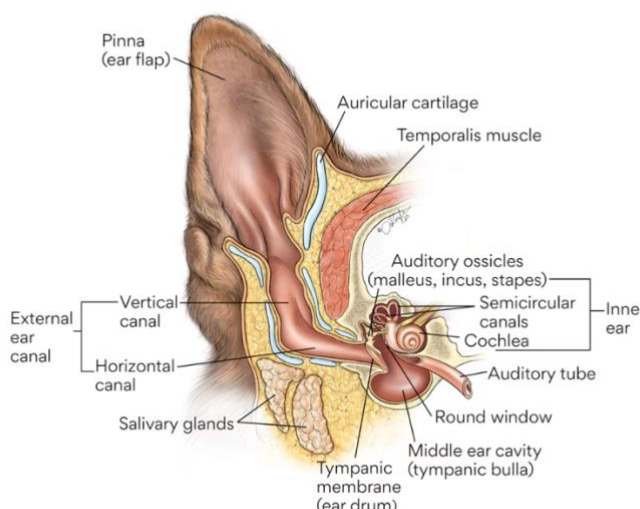
### Quick take

Some pets battle ear infections so severe and long-lasting that the ear canal essentially collapses into scar tissue. At this point, **medications and cleaning no longer help** because they **cannot reach** the infected tissue, and the ear often becomes permanently painful.

When this happens, specialists recommend total ear canal ablation and lateral bulla osteotomy. **“TECA-LBO” surgery**, which removes the diseased ear canal and cleans the bony middle-ear cavity. For most animals, this procedure eliminates the source of pain and infection and restores quality of life.

**Untreated, long-lasting ear infections can lead to severe neurological deficits or death.** Permanent facial nerve palsy, Horner syndrome, vestibular syndrome (loss of balance and head tilt) can develop and may not be reversible even if the surgery manages to cure the infection. Meningitis and meningeal abscessation can lead to death.

Anatomy of a Dog's Ear



### 1) What is “end-stage” otitis?

“End-stage” means:

- The ear canal walls have thickened and hardened
- The ear canal may be mineralized (turned to bone-like tissue)
- Polyps or masses may block the canal
- Infection is chronic and resistant to medication
- There is constant pain and discharge
- The middle ear (bulla) is often infected (otitis media)
- In short: the ear is no longer a tunnel — it's a swollen, scar-filled cavity full of infection.

### Common causes and contributors

- Allergies (especially food or environmental allergies in dogs)
- Chronic untreated/undertreated infections
- Ear mites (especially in cats)



- Foreign bodies (grass awns, foxtails)
- Previous ear surgery
- Hormonal diseases (hypothyroidism, Cushing's)
- Ear canal masses/polyps
- Breed anatomy (e.g., Spaniels, Bulldogs, Poodles) — narrow ear canals or hairy ears

## 2) Why medicine no longer works at this stage

- When swelling and scarring close off the canal:
- Medication can't reach the infection
- Bacteria sit in pockets that antibiotics cannot penetrate
- Cleaning is impossible and often extremely painful
- Resistant bacteria develop
- The middle ear traps pus and debris
- Giving more drops or antibiotics becomes futile — it prolongs suffering and **risks drug-resistant infections.**

## 3) Symptoms owners notice

- Foul odour
- Thick discharge (brown, yellow, or bloody)
- Scratching and head shaking
- Rubbing the ear on furniture
- Crying or snapping when touched
- Holding head to one side
- Ear canal not visible / swollen shut
- Balance changes or circling (when middle ear affected)

## Cats may show:

- Ear-tilt
- Scruffed coat, hiding, irritability
- Loss of appetite due to pain
- Polyps (common in young cats)

## 4) Why surgery is recommended

Once the canal becomes scarred and closed, no medications can reverse the damage.

## Surgery:

- Removes the pain source
- Eliminates chronic infection
- Prevents further nerve damage and middle-ear bone destruction
- Improves comfort, sleep, mood, and appetite
- Removes cancer if present (in some older pets)
- Most pets feel dramatically better after healing.

## 5) The surgical procedure: TECA-LBO

### 1. TECA = Total Ear Canal Ablation

The surgeon removes:

- Entire vertical and horizontal ear canal



- Diseased tissue and debris
- Any masses or polyps

The ear flap remains (cosmetic appearance is normal aside from a closed canal opening).

## 2. LBO = Lateral Bulla Osteotomy

- A window is opened into the middle-ear bone (bulla) so the surgeon can:
- Remove infected bone lining
- Flush out pus, debris, bacteria
- Cure infection at the source

### Anesthesia

Pets are carefully monitored and given strong pain control, nerve blocks, and sometimes local anesthesia to reduce pain and anaesthetic requirements.

## 6) Expectations & recovery timeline

### ○ Hospital stay

Usually overnight or 1–2 days

Pain control, fluids, antibiotics as needed

### ○ Home recovery

2–4 weeks of restricted activity

Pain medications, sometimes antibiotics

E-collar to prevent scratching

Warm compresses and gentle cleaning by surgeon's instructions

### ○ Recheck appointments

How pets act after surgery

Many owners say their pets act happier and more relaxed almost immediately, even before stitches are removed — because the chronic pain is gone.

## 7) What is hearing like after surgery?

### Important point:

**Most pets having TECA-LBO already have very poor hearing** in the affected ear.

After TECA-LBO: Hearing on the operated side is reduced, but **not usually completely gone**. The petrous bone will still transfer the sound waves to the inner ear. Pets rely heavily on the other ear.

Dogs and cats adapt extremely well

Most owners report no noticeable change in how their pet communicates or navigates.

## 8) Complications

Surgical complication rates vary according to the expertise of the surgeon, infection severity, and underlying disease.

Reported broadly in veterinary literature:



| Complication                                | Approximative rate             | Notes                                                                                     |
|---------------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------|
| Facial nerve weakness/paralysis             | 5–15% temporary, <5% permanent | Most temporary cases resolve in 2–6 weeks                                                 |
| Wound infection/dehiscence                  | 5–10%                          | Higher if resistant bacteria present                                                      |
| Fistula (tract/drainage) requiring revision | <5–10%                         | From retained infected bone debris<br>Experience of the surgeon should decrease the risk! |
| Horner's Syndrome (cats > dogs)             | <5%                            | Usually temporary                                                                         |
| Deafness in that ear                        | Common pre-op                  | Usually no noticeable change to owner                                                     |
| Balance issues                              | Rare                           | Often temporary if middle ear inflammation present                                        |

#### Good news

Success rate: ~90–95% achieve pain-free life with resolution of infection.

#### 9) Prognosis

- **Very good**

When surgery performed by experienced surgeon  
When there are no pre-existing neurological deficits or conditions.  
Underlying allergies/skin disease are managed  
Post-op instructions followed  
Infection thoroughly removed

#### Excellent long-term outcome for most pets:

Return to normal activity quickly, stop scratching/shaking, sleep better and are happier  
No more odour, discharge, pain, or medicines  
Many owners say they wish they had chosen surgery sooner.

#### 10) What owners should ask their vet/surgeon

- Is the canal open enough for medication to reach the infection?
- Do imaging or flush results show middle-ear involvement?
- Should we consider CT or bulla imaging before surgery?
- What pain management plan will be used?
- Who performs TECA-LBO most often at this hospital?

#### 11) Tips for caregivers at home

Keep the E-collar on until cleared  
Give medications exactly as prescribed

Monitor for:



- Redness or discharge from incision
- Swelling or foul smell
- Difficulty blinking on the surgery side

Offer soft bedding

Prevent scratching/head-shaking

Treat underlying allergies long-term if present

## 12) Key veterinary reference suggestions

- American College of Veterinary Surgeons (ACVS) — Ear Disease & TECA guidance
- Cornell University College of Veterinary Medicine — Chronic ear disease articles
- Royal Veterinary College Client Handouts — Otitis externa/media & TECA surgery
- "Ear Surgery in Dogs" – VCA Hospitals client education page
- "Otitis in Cats" – Cornell Feline Health Center

## Bottom line

- End-stage ear infections are painful and not curable with medication
- Dramatic situations and permanent neurological deficit can arise from a long-standing infection. Mortality associated with meningitis and meningeal abscessation in patients that remain chronically infected. Usually, this situation carries a guarded prognosis. Early treatment is therefore recommended.
- TECA-LBO is the gold-standard surgery and offers >90% long-term success
- Most pets are happier, more comfortable, and pain-free after recovery
- Early surgery avoids months (or years) of discomfort and repeated antibiotics
- Permanent hearing loss is uncommon, as hearing is usually poor before surgery anyway