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Otitis media in dogs & cats

Quick take

"Otitis media" means infection/inflammation inside the bony middle ear (the bulla).

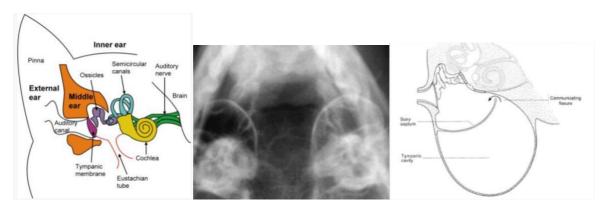
In dogs it often follows months of outer-ear (canal) disease that finally breaches the eardrum; **in cats** it's commonly linked to inflammatory polyps growing from the middle ear or nasopharynx.

When the bulla is gummed up with infected tissue, debris, or a polyp, medicine alone often can't clear it.

Surgical options include myringotomy with video-otoscopic bulla lavage, **ventral bulla osteotomy** (VBO), or—in end-stage canal disease—total ear canal ablation with lateral bulla osteotomy (TECA-LBO).

Overall, modern series report good resolution rates, with predictable, usually temporary complications (like Horner's syndrome in cats after VBO).

In the absence of treatment, **long-standing infection can lead to permanent neurological deficits or even death** (meningitis, meningeal abscessation).



1) What's going on inside?

Dogs: long-standing otitis externa (outer-ear inflammation/infection) can rupture the eardrum so bacteria, yeast, and debris enter the bulla. Thick secretions and inflamed lining keep the cycle going. Imaging (especially CT) is far better than plain x-rays at spotting this build-up and planning treatment.

Cats: many cases are inflammatory polyps growing from the bulla's mucosal lining; they can extend into the canal or nasopharynx and bring secondary infection. Removing the polyp and cleaning the bulla cures most cats, though recurrence depends on technique (see below).

How it looks at home:

- persistent discharge or odour,
- pain around the ear,
- head-tilt or balance issues,
- ear-tilt/Horner's look (droopy eyelid, small pupil) if nerves are irritated.
- Cats with nasopharyngeal polyps may snore, mouth-breathe, or swallow noisily.

2) When do vets recommend surgery?

- Failure of medical therapy or repeat relapses after appropriate culture-guided drugs and ear cleaning.



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- Imaging shows bulla disease (fluid/soft tissue, thickened lining, mineralized material). CT is commonly used for this.
- If a soft tissue component is picked up on the CT scan, there is a concern for tumour and excision with VBO is recommended.
- Polyp present (cats)—especially when it regrows after simple traction removal.
- End-stage canal disease (dogs or cats) where medicine cannot reach the infection—these are the TECA-LBO candidates.

3) The surgical toolbox (what each procedure does)

A) Myringotomy + video-otoscopic bulla lavage (dogs ± cats)

What it is: Under anesthesia, the eardrum is opened; with a video-otoscope, the surgeon flushes and curettes the bulla, removing infected secretions and debris, and collects samples for culture.

When it's used: chronic middle-ear disease without a polyp or end-stage canal; commonly a first surgical step in dogs.

Results: A JAVMA series reported long-term improvement after video-otoscopic bulla lavage in chronic otitis media; many patients avoid more invasive surgery if aftercare and underlying issues (allergies, canal disease) are managed.

B) Ventral Bulla Osteotomy (VBO)

Most common curative surgery for feline otitis media / polyps; used in some dogs with primary middleear disease (e.g Cavalier King Charles with PSOM).

What it is: A small incision under the jaw; the surgeon opens the bulla from below, removes diseased lining or a polyp at its base, and flushes thoroughly.

Why it helps: directly clears the source inside the bone rather than just trimming what's visible in the canal or throat.

Outcomes in cats: Reviews and summaries report complete resolution in ~66–80% in published cohorts (differences reflect case mix and follow-up), with known, usually temporary neurologic side effects (see complications).

Dogs: VBO is used when the canal is healthy (No otitis externa) but the bulla is diseased; choice varies by case and surgeon. Less experienced surgeons might use the more aggressive TECA option as they are not comfortable with this technique. The surgery can be more challenging than in cats due to a different anatomy, however an experienced surgeon should be able to perform the surgery and salvage the unaffected ear canal, thereby preserving the hearing function on the ear.

C) Traction-avulsion (polyp "pulling") in cats

What it is: The polyp is grasped (via the mouth or ear canal) and gently avulsed from its stalk.

Pros/cons: quick and minimally invasive but higher recurrence if the polyp's base in the bulla isn't also addressed; some surgeons add a short course of steroids to reduce recurrence. **Reported recurrence after traction alone ranges ~15–50%**, influenced by surgeon experience; adding a steroid taper has been associated with much lower recurrence (0% in a tiny series vs 64% without steroids), but numbers are small. **VBO generally has lower regrowth risk than traction alone.**

D) TECA-LBO (Total Ear Canal Ablation + Lateral Bulla Osteotomy)

What it is: A salvage procedure that removes the entire diseased ear canal and opens/cleans the bulla from the side.



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When chosen: end-stage outer-ear disease with coexisting middle-ear infection (common in dogs, some cats). This eliminates the chronic pain source and the infected canal entirely.

4) What recovery looks like

Hospital: usually same-day or 1–2 nights depending on procedure and comfort.

Home: cone on, pain meds ± antibiotics (quided by culture), quiet activity 2–4 weeks.

Rechecks: suture removal ~2 weeks; follow-ups to ensure no fluid reaccumulation and that side-effects (e.g., Horner's) are resolving.

Most cats and dogs feel much better quickly once the deep ear pressure/infection is gone.

5) Complications & typical rates

Rates vary with anatomy, severity, and surgeon experience. Here are owner-useful ranges you can discuss with your vet.

After VBO (especially in cats)

- Horner's syndrome (droopy eyelid, small pupil, third eyelid up): common and usually temporary in cats because the sympathetic nerve runs along the bulla wall. Reported rates vary widely by source and technique; ranges from ~20-80% transient are cited across texts and reviews, with most cases resolving over weeks.
- Vestibular signs (head-tilt, balance issues): uncommon and usually improve as inflammation settles. Facial nerve paresis/paralysis: uncommon, often transient.
- Persistent/recurrent infection: minority of cases; thorough curettage and culture-guided meds reduce risk. Overall resolution after VBO is reported around 66-80% in feline series.

After traction-avulsion (cats, polyps)

Recurrence: commonly reported ~15-50%, higher with less experience; one review cites 14% for very experienced surgeons vs 35% for less experienced. A small study suggested 0% recurrence with a short prednisolone taper vs 64% without—but sample sizes were tiny. Talk with your surgeon about their protocol and numbers.

Horner's/vestibular signs: can still occur even with traction, usually transient.

After myringotomy + bulla lavage

Short-term discomfort and rare re-accumulation requiring a repeat flush. Many dogs improve long-term when underlying causes (allergy/dermatitis) are managed.

After TECA-LBO

Facial nerve deficits: commonly reported post-op but often improve over weeks; one retrospective (dogs & cats) documented facial paresis/paralysis in ~49% of ears early after surgery.

Draining tracts / residual infection: small percentage need revision if infected bone/epithelium persists. Meticulous bulla curettage lowers this risk. □ PubMed

6) How do vets choose among the surgeries?

Is the external ear end-stage? - Yes → TECA-LBO (addresses canal + bulla). - No \rightarrow go to 2. Is there a polyp (cats)?



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– First-line may be traction–avulsion (especially nasopharyngeal polyps) ± short steroid taper, with the understanding that recurrence is possible; VBO preferred when recurrence, bulla disease, or owner wants the lowest regrowth risk now.

Chronic middle-ear infection without polyp?

- Dogs: start with myringotomy + video-otoscopic bulla lavage; if relapse or severe bulla pathology on CT, consider VBO (when canal is salvageable) or TECA-LBO (if canal is end-stage).
- Cats: VBO when medical management fails or imaging shows substantial bulla disease.

Imaging to plan: **CT beats radiographs** for detecting and mapping bulla disease, helping choose the least invasive procedure that will still be curative.

7) What you can do at home (and for the long haul)

Follow post-op instructions to the letter: cone on, give meds on time, and show up for rechecks. Watch for normal transient effects after VBO in cats (Horner's look, mild tilt)—your vet will tell you when to be concerned.

Treat the "why": many dogs have underlying allergies/dermatitis; many cats had a polyp source. Addressing underlying issues reduces relapses in the other ear.

8) What outcome should you expect?

Cats with polyps: Excellent chances of being pain-free and breathing/hearing better after definitive treatment. VBO has the lowest recurrence; traction-avulsion works for many but can regrow (ranges above).

Dogs with chronic OM: Many improve with myringotomy + lavage, but a subset needs VBO (if the canal is okay) or TECA-LBO (if the canal is ruined). Owners typically report much better comfort once the bulla is cleared or the end-stage canal is removed.

9) Good questions to ask your surgeon

- What does the CT show inside the bulla? (fluid, thickened lining, polyp base): if soft tissue present, then VBO or TECA might be the only option for a cure;
- For my cat's polyp, would you start with traction or go straight to VBO—and why? What are vour recurrence rates?
- What short-term effects should I expect (e.g., Horner's), and how long do they usually last?

10) Selected references

- Today's Veterinary Practice Practical diagnostic & treatment approach to feline otitis media;
 notes ~66–80% resolution in published VBO cohorts.
- JAVMA 2004 Video-otoscopic bulla lavage outcomes for chronic OM (dogs): long-term improvement after endoscopic lavage/debridement.
- JAVMA 2019 Complications after feline VBO (Horner's, head tilt, facial nerve paralysis) and outcomes.
- VeterinaryPartner (VIN) Feline nasopharyngeal polyps: traction-avulsion recurrence ~15–50%; owner-level explanation.
- Janssens 2016/2017 Polyp traction-avulsion outcomes: recurrence lower with greater surgeon experience (14% vs 35%).



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- CT vs radiography CT markedly outperforms x-rays for diagnosing canine middle-ear disease (31 dogs).
- VIN surgical reviews / textbooks Overviews of VBO techniques & complications (Horner's, facial nerve issues) and TECA-LBO as salvage for end-stage disease.

Bottom line

Surgery is often the turning point for stubborn middle-ear disease because it cleans out the inside of the bone (the bulla) or, in end-stage cases, removes the entire diseased canal.

Cats with polyps: both traction-avulsion and VBO can work, but VBO has the lowest regrowth risk; Short-term Horner's is common and usually fades.

Dogs with chronic OM: many respond to myringotomy + bulla lavage; if relapse or end-stage canal disease is present, VBO or TECA-LBO provides durable relief.