

BUBBLEGUM IN THE CAT EAR:**Feline Inflammatory Aural Polyps are not a Toddler's Misadventure****Synopsis-- Anatomy and the Disease**

The nasopharyngeal-aural inflammatory polyp (NPA polyp) condition is seen in **young cats**. The age at presentation must take into account the patient who has had “problems” since a kitten, even if the patient is currently 5yrs old. As a patient ages, the likelihood of other conditions (aural: ceruminous gland adenoma/adenocarcinoma; and pharyngeal: lymphoma, squamous cell carcinoma) rises.

It is thought that all of these masses originate in the middle ear/bulla lining, they expand from that source either down the Eustachian tube or up through the tympanum into to the external ear canal. To cause problems, they must be big; in my experience, they are approximately 1-1.5cm in diameter with a suggestion of a stalk after they are “plucked out”. **In the ear, this is in distinct contrast to the fleshy, granulation tissue** often seen in the deep recesses of the external ear canal, near the site of a ruptured tympanum in a chronic otitis case. The NPA polyp obliterates the external canal and looks like a piece of bubblegum expanding up from below. It is not possible to see with an otoscope deep to the polyp; palpation with a thin probe can help create the impression of polyp-like and not fixed to canal walls.

In the pharynx, it is often necessary to pull the soft palate rostrally to appreciate the full extent. Sometimes a bulge can be visualized in the soft palate, and other times a darker pink mass effect can be appreciated peaking caudal to the edge of the soft palate.

To be considered “just” a NPA polyp with its associated good prognosis, it should meet the classic list of signs.

- Young cat (very rare in dogs)
- Bulbous, macroscopic, pink expansile mass in external canal (seen with naked eye or “bumped into” with otoscope) AND Chronic otitis externa
- Bulbous, macroscopic, pink expansile mass dorsal to the soft palate AND Stertorous breathing

Surgical Overview:

With a high index of suspicion for “just” an NPA polyp in a young cat, there are two treatment options.

- 1) Traction removal: The mass effect is grasped with (usually) curved hemostats and firm, steady traction is apply to “pluck” the mass from the canal or the nasopharynx. Hemorrhage is controlled with topical pressure and/or epinephrine-soaked sponge. If the disease was manifest in the external ear canal, copious saline lavage is applied. No topical medications are used.
- 2) Ventral bulla osteotomy in addition to traction removal: After removing the mass (see above), a surgical approach to the ventral bulla is performed; an osteotomy made in the osseous bulla; lavage, suction and lining debridement is performed.

The **indications & rationale** for surgical treatment are:

- Traction only treatment has a slightly higher chance of recurrence. In my hands, 9/10 cases are successfully treated with this initial conservative approach.

- The addition of a ventral bulla osteotomy is reasonable if the goal is to optimize no recurrence or if a bacterial external/middle ear infection has been chronic/severe.

Other options for treatment (besides surgery) are:

- No standalone medical options have been demonstrated to be effective.

Supportive/ancillary options with surgical treatment are:

- In cases of additional otitis externa/media, the addition of sedated otic lavage q1wk x 2-4wks and oral antibiotics may be beneficial to eliminate otitis media.
- Some authors have suggested oral steroids as an ancillary treatment for 2wks; I have not used this.
- It would be uncommon to need a total ear canal ablation (TECA) in relation to this condition; the external canal in cats is rarely irreversibly damaged.

The **perioperative experience** for pet and owner includes:

- The patient will need general anesthesia for both treatment options, easily achieved on an outpatient basis.
- The hair around the ear may be clipped for ease of hygiene or the surgical approach.
- Bloody discharge from ear or bloody saliva can be expected for up to a week.
- Head shaking and/or stertorous breathing can persist for up to a week.
- Some patients may be recommended to return weekly for sedated otic lavage until middle ear disease has subsided.

Expectations for outcome are:

- A return to quiet(er) breathing for cats with nasopharyngeal disease.
- An elimination of external ear canal disease for cats with otic disease.

Complications that may arise with this procedure are:

- If middle ear disease neurologic signs are present (head tilt, 3rd eyelid elevation), treatment may not reverse these.
- If these signs are not present, treatment may cause them transiently or permanently.

Postoperative **outcomes may be poor** due to the above complications, and/or:

- Otitis externa/media may persist and need additional supportive treatment

What a surgeon needs prior to surgery:

- Affected body part “marked” by owner for confirmation (wax “costume makeup” works well)
- Skin near the surgery site CLEAR of infection (papules, pustules, crusts, collarettes, etc.) If urgent surgery, owner must be alerted to *increased risk* of incisional, deep and/or implant infections.
- An informed owner with preferred plan for treatment (traction vs. ventral bulla osteotomy + traction)

General considerations and complications for all surgery/anesthesia procedures are:

- *Difficult and/or painful anesthetic recovery (variable; may require additional medications or re-hospitalization)*
- *Incisional infections (rare, minor; usually require oral antibiotics)*
- *Incisional dehiscence (rare, minor or major; may require surgical revision)*
- *Adverse anesthetic event (rare, major; may result in serious impairment or death)*

Proper owner expectations are important to a successful experience and patient outcomes. Please discuss this information with your clients while assisting them with decision-making for **Nasopharyngeal-Aural Polyp removal**.

Lara Rasmussen, DVM, MS

Diplomate, American College of Veterinary Surgery

DIRECT VETERINARY SURGERY, LLC