Feline Otitis: Diagnosis and Treatment

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Feline otitis can be a challenging clinical problem. A commonly used clinical approach to treatment of canine otitis rarely yields satisfactory results when applied to cats. The presentation will focus on common causes of feline otitis. Emphasis will be placed on diverging concepts of treatment between dogs and cats.

Otitis externa is a term used when only the external canal, outside of the tympanic membrane, is involved. When the tympanum and the tympanic bulla are involved, the term otitis media is used. Otitis interna implies damage to the hearing apparatus. Neurologic symptoms and deafness are usually present.

Otitis is usually a multifactorial problem. Predisposing factors are those that may allow inflammation to occur. Ear canal stenosis and pinnal deformity are far more common problems in dogs than in cats. High humidity environments or cats that swim frequently are more at risk due to canal tissue maceration. One of the most common predisposing causes of feline otitis is the use of a cotton swab to remove normal ear canal excretions. Some cats have excessively waxy ears and should be left alone.

Primary causes are those that induce otitis directly. Foreign bodies or ectoparasites are the most common causes. Although some allergic cats will have concurrent otitis, this occurs far less commonly than in the dog. Additional primary causes include: autoimmune diseases, neoplasia, and fungal causes. A polyp is usually the result of chronic inflammation. However, in some cases, the presence of a polyp may lead to ear canal inflammation.

The perpetuating factors, bacteria and yeast organisms that are the source of frustration in many canine otitis cases, are infrequently a problem in cats. A polyp is usually a perpetuating factor as a result of chronic inflammation. One of the most important, yet least discussed factors, is the allergic or irritant reaction that occurs after application of topical medications. Anti-inflammatory corticosteroids may be the cause of the reaction. This is counter intuitive considering that these should reduce the amount of inflammation, not be the cause of the problem.

It is possible to quickly limit the differential diagnoses based upon the observation of a unilateral versus a bilateral problem. Unilateral causes are invariably a foreign body, polyp, neoplasia, or trauma (aural hematoma). Bilateral problems are usually parasitic, metabolic (systemic illness), allergic, or autoimmune. Dermatophytosis and bacterial or yeast infections may present as unilateral or bilateral problems.

The proper treatment of feline otitis depends upon an accurate diagnosis. This is no time to guess with a shot of steroids to see what happens. A thorough history is essential. Simple information regarding unilateral versus bilateral problems along with the treatments used are essential starting points. An otoscopic examination is also essential. It is the only way to determine if the tympanum and bulla are involved. It is also the easiest way to find otofectes ear mites and ear masses. Cytology is an important diagnostic tool to evaluate the perpetuating factors. However care should be used in
placing swabs into a cat’s ear when only brown waxy debris and no inflammation are present. This is often the source of inflammation and further complications! A culture and sensitivity should only be performed for refractory cases or those with highly exudative otitis.

Because many cats may have a metabolic cause of their otitis, additional lab work including CBC, serum chemistry profile, thyroid analysis, FIV and FELV testing may be indicated. Routine radiograph imaging rarely yields useful information. A C.T. scan is better to analyze the extent of the problem when neoplasia or polyps are involved. It stands to logic that any tissue removed from the ear should be sent for histopathologic analysis. When ear biopsy is indicated, the surgeon should be prepared for an extensive procedure including bulla osteotomy. Referral to a boarded surgeon is recommended.

When cleaning the ear canal of the cat, general anesthesia is usually indicated. The author prefers to use nothing other than warmed sterile saline for cleaning cat’s ears, even when ear mites are present. Iodine has been shown to be highly ototoxic to cats. Because chlorhexidine has been shown to be ototoxic to dogs, it is a rational leap of faith to avoid this product in cats as well. Besides, there are no licensed products for the ear canal that contain chlorhexidine. I have used on occasion, TRIZ-EDTA® and ceruminolytic agents but I tend to avoid anything other than sterile saline for cats.

One of the major differences in the approach to treating otitis in dog from cats involves the usage of topical medications. Topical medications are the mainstay of success in canine otitis. It is my opinion that they should be avoided in treating cats. I have successfully treated refractory otitis in the cat simply by discontinuing the use of topical medications. For undefined reasons, cats tend to develop irritant reactions and true contact allergy reactions in the ear pinna and canal at a significantly higher rate than in dogs (my observations and clinical bias). Also, I have been able to treat many cases successfully without the use of topicals. This is rarely the case in dogs. Lastly, cats hate topical products. Their fastidious nature causes them to frantically remove any topical agent applied to the skin surface. This is a potential source for aural hematoma formation and also for the clients to be wounded by a fractious cat. My advice is to avoid the use of topical medications in the cat!

With that being stated, there are exceptions to the rule. Pyrethrin based ear medications for the treatment of ear mites are very inexpensive compared to other products. They are effective and cheap but the precautions about topical medications should be considered. The topical application of selemectin (Revolution®) is my treatment of choice for resolving ear mites. I use this product every 14 days for three treatments. I strongly recommend this product for monthly usage in general for outdoor cats to avoid ear mites, Notoedres, and heartworm disease. Injectable or orally administered cattle ivermectin is not licensed nor approved for use in the cat for any reason. There is a topical otic suspension consisting of 0.01% ivermectin (Acarexx®) that is licensed and approved and highly effective. I strongly recommend using a second treatment for total remission to be achieved. Milbemite® is a topical otic containing Milbemycin 0.1%. Community practice service at TAMU uses this product with perceived excellent results. Very few cases have needed a second treatment. With the highly effective and licensed products available there is no reason to use off-label ivermectin. Any untoward reaction from using cattle formulations of ivermectin will be the responsibility of the clinician.
When bacteria or yeast are perpetuating factors are present in the cat, systemic medications should be used even if the middle ear is not involved. This is absolutely contradictory to my approach to canine otitis. Cats rarely get bacteria or yeast infections except for iatrogenic causes and those associated with ear masses. A good empiric selection of an antibiotic for the cat would include clindamycin (Antirobe®) or amoxicillin with clavulanate (Clavamox®) at standard package dosage. Although first generation cephalosporin drugs are very useful in the dog, cats tend to vomit and become anorexic with these products. High dosages of enrofloxacin (Baytril®) should be avoided due to blindness that has occurred in some cats. However, marbafloxacin (Zenequin®) may be indicated for usage only if based upon culture and sensitivity. Itraconazole (Sporanox®) is the recommended treatment for severe yeast otitis in the cat. The recommended dosage is 10 mg/kg given once daily until a remission is reached. This drug is not licensed for use in the cat and is very expensive. Anorexia and or vomiting may occur. Ketoconazole should be avoided in cats due to hepatopathy. Cats rarely get primary bacteria or yeast infections.

Surgery is indicated for any mass in the ear of a cat. The extent of the procedure is based upon the problem. Appropriate diagnostic procedures including a C.T. scan will help to determine the extent of the disease and can aid the surgeon in giving the owner a reasonable prognosis. This however, depends upon histopathologic diagnosis. There are always potential post-surgical complications to consider. Head tilt or Horner’s syndrome due to facial nerve damage may occur. Chronic draining tracts can also be a problem. I recommend a referral to a cat friendly surgeon for most ear surgery. Usually consultations with oncology specialists are available when radiation therapy is part of the ancillary treatment.