Sponsored by Virbac

Canine Otitis Externa & the Importance of Ear Cleaning

ARDEN KLINCZAR, DVM | DERMATOLOGY RESIDENT | ANIMAL DERMATOLOGY CLINIC | MARIETTA, GEORGIA

Otitis externa, or inflammation of the external ear canal, is common in small animal practice.[1] Routine ear cleaning is an essential part of maintaining a favorable ear environment and keeping ears healthy in dogs prone to otitis externa.[1-4]

Understanding the causes and factors contributing to development of otitis externa is critical to successful management.[2-4] Causes may directly induce inflammation (primary causes [eg, allergy or endocrine disease]) or lead to disease in abnormal ears (secondary causes [eg, yeast or bacterial overgrowth, overcleaning]).[1-7] Predisposing factors such as conformation of the ear are present before disease develops, and perpetuating factors such as edema or proliferative changes to the ear canal and changes in the tympanic membrane occur as a result of inflammation and can prevent resolution.[1,7] Once identified, primary causes should be addressed, secondary infections resolved, and predisposing and perpetuating factors managed.[1,7]

THE ROLE OF EAR CLEANING

Ear cleaning is an important part of managing otitis externa and should be performed routinely in dogs prone to otitis externa to prevent recurrence.[3,6,7] When performed well, ear cleaning helps maintain a normal ear environment by removing debris, microbes, small foreign bodies, and biofilm that could result in otitis externa.[6,8] By eliminating exudate and debris, a proper assessment of the ear canal and the tympanic membrane can be performed and the inactivation of some antimicrobials by inflammatory material prevented.[6] Ear cleaning is beneficial in dogs with inflamed ears secondary to allergies, seborrheic ears with excessive cerumen production, and/or stenotic or pendulous ears in which normal epithelial migration is impeded.[6-8]

EAR CLEANING TECHNIQUES

Several cleaning techniques (eg, manual cleansing, bulb syringes, ear flushing) can be used.[1,6] Ear wash or rinse is the most common method used at home; this technique should be clearly demonstrated to the owner to ensure effective cleaning. When performed poorly, ear cleaning can cause trauma, ongoing inflammation, and discomfort, leading to decreased compliance.[7]

To prevent maceration and secondary infection, ear cleaning should generally be performed every 48 hours.[6] Follow-up examinations are important to assess whether the ears are being cleaned effectively or whether the owner should receive better instructions or employ a new technique.

EAR CLEANING PRODUCTS

Many ear cleaning solutions with different active ingredients are available.[1,6,7] The clinician should understand the purpose of each ingredient to recommend the appropriate product.[1,3] It is important that no harm is caused when using an ear cleanser, particularly in ears with a ruptured tympanic membrane. Saline and water should be used in patients without intact tympanic membranes, as many ear cleaning solutions are potentially ototoxic.[6] Ear cleansers may be used more frequently in certain circumstances (eg, infected ears) or less frequently if used as maintenance to prevent recurrence.

Antimicrobials

Some ear cleaners, such as those with chlorhexidine or tris-EDTA, have been shown to have antimicrobial activity, which may be due to active ingredients or a low pH.[9-11] Products like these can limit bacterial and yeast proliferation, helping prevent recurrent infections.[12,13]

Ceruminolytics

Ceruminolytics emulsify waxes and lipids, which are then more readily flushed from the ear,[1,6] and are commonly used to break up waxy or purulent debris prior to ear flushing or other cleaning under sedation.[6,7,14,15] Ceruminolytics can be ototoxic if left in the middle ear; flushing with water or saline after use may decrease the chance of ototoxicity.

Astringents

Astringents are used to dry ears and prevent maceration and secondary infection.[6,7] They are often combined with ceruminolytics and surfactants in drying/cleaning products but can be used as sole therapy.[6,7] Common astringent ingredients such as isopropyl alcohol, boric acid, benzoic acid, and salicylic acid can be useful after the ear has been cleaned or prophylactically after bathing, swimming, or the application of aqueous-based solutions in dogs prone to otitis.[6-8]

Some ceruminolytics and astringents can cause pain when used in sensitive ears.[6] Choosing a nonirritating formula for maintenance use is essential to prevent complications and improve compliance. EPIOTIC® Advanced Ear Cleanser is cleanser that breaks down wax and has astringent properties, with a neutral pH and nonirritating formula. With once to twice daily use, EPIOTIC® Advanced Ear Cleanser has been shown to reduce microbial adhesion and work as well as acidic cleaners, with no noted adverse effects.[6,9,16]

CONCLUSION

Effective ear cleaning plays an essential part in otitis externa by helping to manage inflammation and infection that can lead to more complicated otic disease. The product chosen should be based on the individual patient and the underlying causes and factors at play. Demonstrating proper application of the ear cleanser for the owner can help prevent trauma and ongoing inflammation of the canal, which can inhibit resolution of otitis. Frequent follow-up and ongoing training for owners is important to ensuring good compliance and long-term outcomes.

For references, please see **cliniciansbrief.com/article/canine-otitis-externa-importance-ear-cleaning**