Otitis Media in Dogs Nicole A Heinrich DVM DACVD McKeever Dermatology Clinics

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Otitis media is an infection of the middle ear. The most frequent causes of otitis media in dogs are:

- 1) extension of otitis externa past the eardrum into the bulla
- 2) migration of bacteria from the pharynx to the middle ear via the Eustachian tube
- 3) Aural tumor
- 4) foreign body (plant awn)

The most common cause of otitis media in dogs is the migration of bacteria from the outer ear to the middle ear. This occurs in cases of chronic otitis externa. The chronic moisture in the outer ear causes maceration and eventual breakdown of the tympanic membrane. The infection then spreads from the ear canal into the bulla. If the outer ear infection is mostly cleared, then the eardrum heals. Unfortunately, the healed eardrum seals exudate and infection in the middle ear.

Signs of a middle ear infection include:

- 1) pain (avoiding being petted, reluctance to chew, flattened pinna, shaking the head, pawing the ear)
- 2) opaque, erythematous, and sometimes bulging tympanic membrane
- 3) head tilt and/or Horner's syndrome
- 4) recurrent otitis externa

Sometimes a middle ear infection can spread to the inner ear. These dogs have vestibular signs.

Many cases of otitis media can be treated medically. Pseudomonas is a frequent pathogen of the middle ear. Medical management of otitis media involves treating the otitis externa (if present) with topical antibiotic and steroid based on cytology. Administer oral antibiotic (marbofloxacin is an excellent choice) for 6 weeks. Administer an oral steroid for 4 weeks.

If the otitis media is particularly painful, or if the symptoms have not dramatically improved within 3 weeks, then myringotomy, culture and bulla flush are indicated. The solution to pollution is dilution. If myringotomy is performed, the bulla should be flushed with 250 to 500mL of saline or tepid water in order to break up the inspisated and caseous exudate.

If a foreign body or tumor is present it must be removed before the infection can be resolved.

The most common mistake in the treatment of otitis media is the premature discontinuation of oral antibiotic.

The tympanic membrane is sometimes quite difficult to assess. Often sedation is required. A video otoscope offers a magnified view of the tympanum, and this can be quite useful for the diagnosis of otitis media.