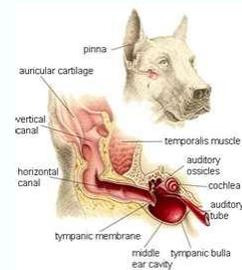




Ear Infections Understanding a Frustrating Disease

Anatomy of the ear: four main areas

1. **Pinnae:** Ear flap, skin that overlays cartilage
2. **Outer (external) Ear:** Ear canals, both vertical and horizontal canals and glandular structures (earwax production).
3. **Middle Ear:** Eardrum, hearing apparatus, Eustachian tubes and facial nerve
4. **Inner Ear:** Vestibular apparatus and cochlea for hearing and balance



Primary Causes of Infection

Hypersensitivity Diseases: Allergies (#1 cause of otitis in dogs), food allergy, contact allergy, atopy (inhaled allergies).

Parasites: Ear mites (#1 cause of otitis in cats), Demodex mites, Sarcoptic mite and ticks.

Keratin disorders: Hypothyroidism, Seborrhea, excessive earwax production.

Glandular Disorders: Gland hyperplasia, altered secretions.



Chronic ear infection

Diagnosis of Otitis

1. Receiving an accurate history from the pet owner.
2. Physical Exam: Feeling the ears and ear canals and otoscopic exam (looking into the ears and canals with magnified light source instrument).
3. Cytology: taking a swab of the discharge in the ears, making a slide and looking at it under the microscope this can determine if we are dealing with a yeast or bacterial infection and how severe an infection may be.
4. Culture and Sensitivity: Special sterile ear swab sent to a lab, to see if any resistant bacteria are grown and is recommended for chronic or persistent problems.

Treatment & Management of Ear Infections

Ear cleanings: A thorough ear cleaning is important for effective management of ear infections. If earwax or debris is not removed, then topical ear medications cannot reach the lining of the ear canals.

Appropriate therapy or medications: Topical medications or oral medications many times chose by what is found on cytology and occasionally anti-inflammatory medications.

Instructions for owners on ear cleanings: Owners should know how to clean their pet's ears, how

often and what cleaner to use.

Recheck/follow-up appointments: Setting up recheck appointments is important because many times the doctor will request a follow up for many reasons. May be to let medication start working and then come back in for a proper ear cleaning and give more or add different medications.

Determine underlying primary cause: When possible the underlying cause should be identified and also treated as part of therapy. (Ex. Allergies).

Remember: Adequate cleaning (including at home) is usually what makes the difference between cases that resolve and those that become chronic.

Three Types of Infection

External Ear Infection (Otitis Externa) Acute or chronic inflammation of the external ear, but can include pinnae.

Can lead to swelling and narrowing of ear canals.

Long-standing irritation can result in mineralization and hardening of the canals.

Most commonly seen in dogs (approx. 20 % or more of dogs seen by vets) and less commonly in cats.

Middle Ear Infection (Otitis Media) Usually results from the spread of external ear infection across a ruptured eardrum.

Inner Ear Infection (Otitis Interna) Results in extension of middle ear infection and is rare.



Clinical Signs of an Ear Infection

Itchy, Painful ears, shaking of the head, redness, swelling, discharge, odor, hair loss, crusting, scaling, ulceration, scabs, broken hairs, crying/whimpering when ears are touched.

Predisposing Factors

Anatomy or conformation of the ears: narrow ear canals, long canals, and floppy ears.

Excessive moisture: Swimmers or bathing

Excessive hair: reduces airflow and will trap bacteria/yeast.

Inappropriate treatment by owners: using the wrong ear cleaner or over the counter medication, irritating ear cleaners or not cleaning well.

Obstructive ear disease: polyps or tumors

If you have a concern about your pet's ears, call us today!

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