

Middle & Inner Ear Infections in Dogs

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The middle and inner ear of dogs and cats is separated from the external ear by the ear drum. It is not possible to see the middle or the inner ear unless the eardrum has been ruptured. Infections or problems in the middle or inner ear require prompt diagnosis and treatment to prevent permanent damage and deafness. The middle and inner ear coordinate hearing and control balance. Therefore, problems in this area often show up as hearing loss or can include a loss of balance or other neurological problems. Fortunately, if caught early, most middle and inner ear infections can be treated successfully.

What is the cause of middle ear infections?

Most cases of middle and inner ear infections in dogs and cats are caused by an extension of an infection in the outer ear. *Staph*, *Strep*, and *Pseudomonas* bacteria or *Malassezia* or *Candida* yeast are often isolated as the infectious agents. Less commonly bacterial infections may ascend from the oral cavity through the auditory tube and into the ear.

What are the symptoms?

The symptoms for middle and inner ear infections are often similar to outer ear infections and include pain in the ear, head shaking, infected or bloody discharge, and scratching or pawing at the head or ear. As the infection in the middle ear progresses, the dog may also have facial paralysis on the infected side due to the inflammation of the facial nerve that runs adjacent to the middle ear. Signs of facial paralysis include difficulty swallowing, drooping eyelids and facial muscles, and a third eyelid that moves up and partially covers the eye. As the infection progresses to the inner ear, the symptoms will include a loss of balance, a downward head tilt, and even circling.

How is it diagnosed?

Middle and inner ear infections are diagnosed with a thorough otoscopic exam and [x-rays](#) of the head. Animals usually need to be anesthetized so that they can be properly examined and so that the ear can be flushed and treated. A ruptured eardrum or an eardrum that is discolored and bulging with fluid is an indicator of a middle and possibly inner ear infection. Most cases of middle and inner ear infections usually have signs of an outer ear infection as well, but not always.

Treatment

Treatment varies depending on the severity of the disease. In mild infections, oral or injectable antibiotics in combination with topical antibiotics and antifungal agents are often used. In more severe or chronic cases, the eardrum may need to be surgically incised and the middle ear flushed and treated. In some cases, more invasive surgery including removal of part of the bony covering of the ear (bullae) through a lateral or ventral bulla osteotomy may need to be performed. In very severe cases, complete removal and closure of the entire ear canal (total ear ablation) may be necessary. In cases where tumors, [allergies](#), or other factors contribute to the cause of the infection, they must also be properly identified and treated for the entire treatment to be successful.

Prevention

While not all middle and inner ear problems can be prevented, the vast majority of them can. Early diagnosis and prompt treatment of the more common outer ear infections will prevent most middle and inner ear infections. Controlling [ear mites](#) and allergies, along with good routine [ear cleaning and care](#) are the key to preventing all ear infections.

