Your pet has been diagnosed with otitis (inflammation or infection of the ear due to bacteria, yeast or mites). Commonly there are underlying causes for ear infections which, if not identified and treated, can make the ear disease difficult to resolve.

What are the underlying causes or diseases for otitis?

1. **Allergies**
   Pollen or food allergies can predispose animals to recurrent or chronic ear infections. Although allergic animals often have other signs such as itchy skin, sometimes ear infections are the only symptom. A hypoallergenic diet trial or skin testing for pollen allergies can help diagnose these underlying diseases.

2. **Hormonal disease**
   Hormonal diseases can suppress the immune system and make pets more likely to develop ear infections. Screening bloodwork may be necessary in some cases to diagnose these diseases.

3. **Middle ear infection**
   This can occur when an ear infection becomes chronic and penetrates through the eardrum into the middle ear. Even if the outer ear infection is treated with topical medications, bacteria from the middle ear can continue to grow and reinfect the ear. Detailed examination of the ears under sedation and/or a CT scan can identify this problem and allow us to determine a prognosis. Oral antibiotics or even surgery may be necessary to treat middle ear infection.

4. **Abnormal ear conformation/hair**
   Some dogs have narrow ear canals or long ear flaps, or have hair growing in the canal. These situations can cause moisture and wax to build up in the ear canals, leading to infection. Prophylactic use of ear cleansers/drying agents is usually needed 1-2 times weekly to prevent infection.

5. **Tumors/polyp**
   Masses in the ear canal such as tumors or polyps can block the canal, leading to infection and preventing topical medication from penetrating well. If growths are present, surgery may be needed to remove them.

6. **Foreign objects in the ear**
   Dried clumps of wax, grass, or other objects can irritate the canal and act as a focus of infection.

Depending on the length of time the infection has been present, tests such as bacterial cultures or CT scan may be needed to determine prognosis and appropriate therapy. *The key to successful treatment of otitis is not only to use appropriate topical/oral medications and cleansers, but to find and treat the underlying disease.*
What are the treatment goals and strategies for otitis?

The ultimate goal of the treatment of otitis externa is to change the environment of the ear canal back to its normal healthy state. A treatment regimen will be designed around the specific needs of your pet.

One of the first priorities will be to clean your pet’s ears. Thorough cleaning will allow medications to work more effectively. The choice of medication depends on assessment of your pet’s problem. If your pet’s problem is related to a bacterial infection, antibiotic preparations will be administered. If your pet’s condition is related to a mixed bacterial and yeast infection, a product that has the ability to deal with both of these types of infectious agents will be prescribed. Many times your veterinarian will select a product that also includes an anti-inflammatory agent. Once the inflammation has subsided, you will notice that your pet will be a lot more comfortable and, therefore, less prone to causing further damage to the ear by scratching, rubbing or shaking.

How do you clean and treat your pet’s ear?

Cleaning:
Before applying topical medication, your pet’s ear needs to be cleaned. Waxy build-up and debris can prevent medications from working well.
1. First fill ear canal with the ear cleaning solution you have been prescribed.
2. Massage the base of the ear to distribute the cleaning solution into the lower ear canal.
3. Allow your pet to shake the solution and debris out.
4. Wipe excess medication and loosened debris from the pinna, or ear flap, with a cotton ball. **DO NOT use cotton swabs.**
5. Repeat the cleaning of the ears as directed.

Treatments:
1. Instill medication to treat the infection as directed.
2. Gently massage the base of the ear to distribute the medication down to the lower ear canal.
3. Continue treating the ears as directed or until your next appointment.

Please call the UTCVM Dermatology Service if you do not see any improvement or if the condition worsens.