Diagnosis

Otoscopic examination:

- 4 Changes in diameter
- ↓ Pathologic changes in the skin
- ↓ Quantity and type of exudates
- 4 Parasites
- Foreign bodies
- ♣ Neoplasms
- Changes in the tympanic membrane should be examined for evidence of disease or rupture.
- It is often not possible because the ear is painful, swollen, or filled with exudate; sedation is usually required. Swelling of the ear canal often makes it impossible to see the tympanic membrane.





Diagnostic Tests:

- **4** Samples for ear diagnostic tests should be collected
- 4 Skin cytology from the external and inner pinnae
- **4** Hair trichograms and skin scrapings for*Demodex*
- Ear swab cytology with mineral oil in young and adult animals (especially cats, because feline demodicosis can present as pruritic otitis)
- Wood's lamp examinations need to be done with care, keeping in mind that the key colour is apple-green fluorescense and that sebum can glow yellow.
- Dermatophytosis affects the hair of the pinnae and hairs in the concave surface of the ear canal.

Microbial Cultures:

- Microbial cultures are taken before otoscopy is completed and before any cleaning is done.
- Samples for culture should be taken with a sterile culturette from the horizontal canal (the region where most infections arise) or from the middle ear in cases of tympanic rupture.
- A bacterial culture and antibiotic sensitivity and an antibiotic mean inhibitory concentration should be done.

Histopathology:

- Histopathologic changes associated with chronic otitis externa are often nonspecific.
- Histopathologic evidence of a hypersensitivity response may support a recommendation for intradermal allergy testing or for a hypoallergenic diet trial.
- Biopsies from animals with chronic, obstructive, unilateral otitis externa may reveal whether neoplastic changes are present.

Radiographic Diagnostics:

- Radiography of the osseous bullae is indicated when proliferative tissues prevent adequate visualization of the tympanic membrane, when otitis media is suspected as a cause of relapsing bacterial otitis externa, and when neurologic signs accompany otitis externa.
- Fluid densities and proliferative or lytic osseous changes provide evidence of middle ear involvement.
- **Unfortunately, radiographs are normal in many otitis media cases.**
- 4 CT or MRI, if available, should be performed for cases of severe, chronic otitis

