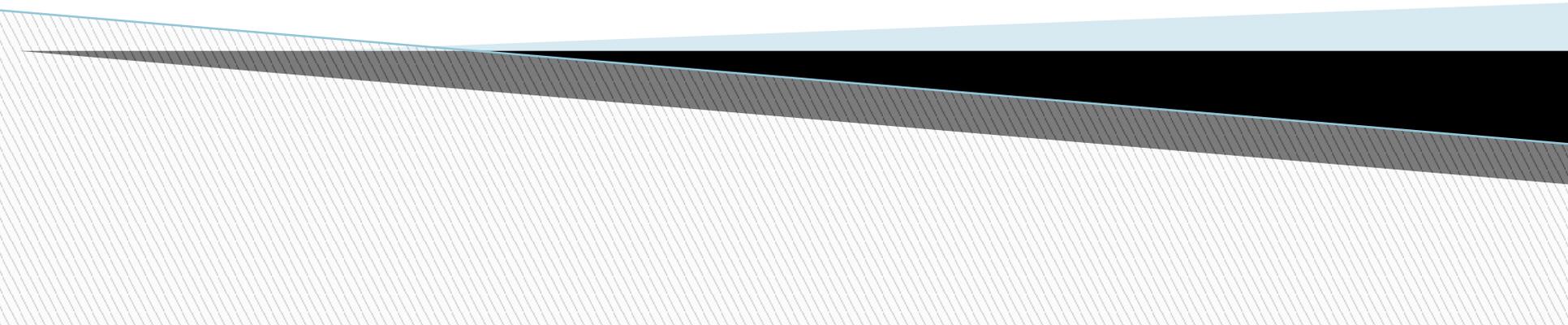
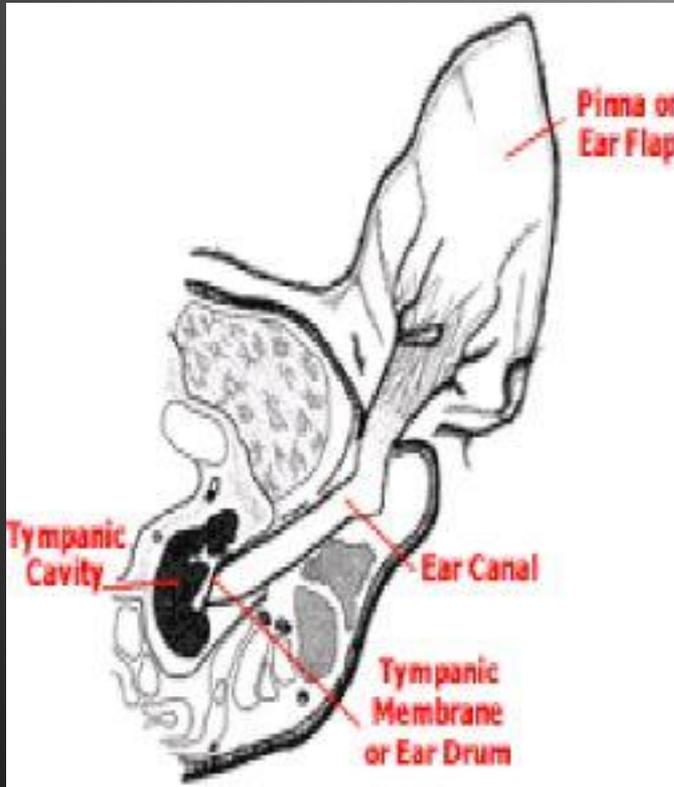


# Dog Ears

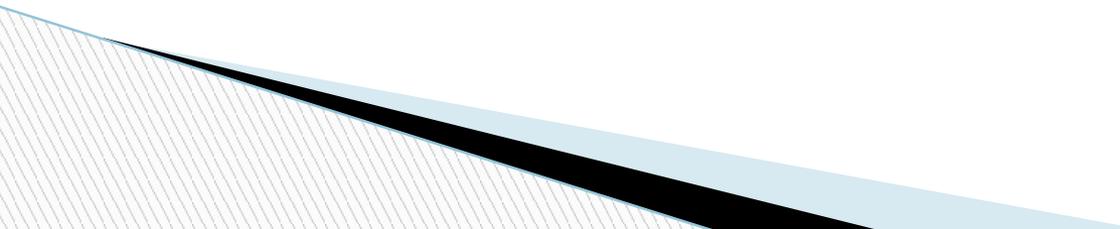


# Anatomy of the Ear



- ▶ Pinna (Earflap)
  - Can be erect or floppy
  - Partial covering of ear canal
  - Direct sound toward eardrum
- ▶ Ear Canal
  - Connects to tympanic membrane
- ▶ Tympanic Membrane (Eardrum)
  - Picks up sound waves through air vibration

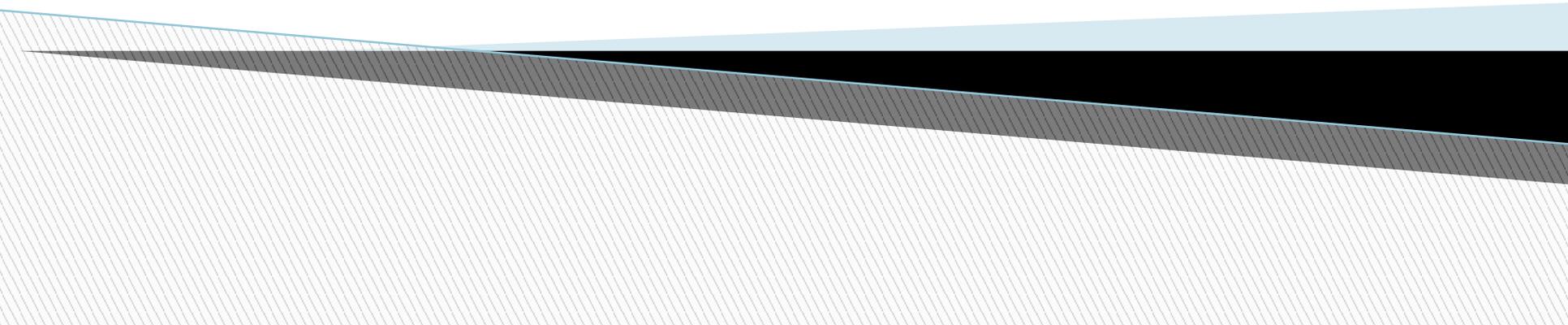
# How Sound Travels in the Ear

- ▶ The eardrum vibrates and stimulates the bones within the middle ear.
  - ▶ The vibrating bones pass the sound vibrations to an area with tiny hairs.
  - ▶ As the hair moves, sound waves are transformed to electrical impulses and then passed to the inner ear where they are transmitted by the auditory nerve to the brain where they are detected as sound..
- 

# Hearing Development

- ▶ Puppies are born unable to hear. The ear canals remain closed, unable to carry sound to the eardrum until the puppy is about ten days of age. The canals become fully open by three weeks of age. As a result of the ear canals 'opening up,' most puppies will begin to hear sounds at about fourteen days of age, with functional hearing by twenty-one days of age.
- ▶ It is very difficult to assess possible hearing impairment until the puppy is at least four weeks of age, at which time deafness, if present, may be noticed and evaluated.

# Dog Ear Problems



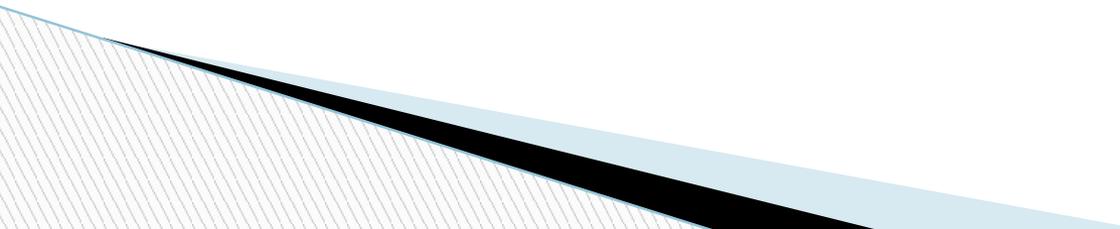
# Common Signs of Ear Disease

- ▶ INSISTENT HEAD SHAKING
- ▶ HEAD KEPT TILTED
- ▶ RUBBING EARS ON FURNITURE, FLOOR, PAWS ETC
- ▶ SENSITIVITY TO TOUCH
- ▶ HEAD SCRATCHING
- ▶ HOT, RED EARS
- ▶ ODOR FROM EARS
- ▶ SCRATHES ON EARS
- ▶ SWOLLEN EARS
- ▶ DISCHARGE FROM EARS
- ▶ LOSS OF BALANCE
- ▶ ULCERS THAT DO NOT HEAL
- ▶ LOSS OF HEARING
- ▶ PRESENCE OF FLIES

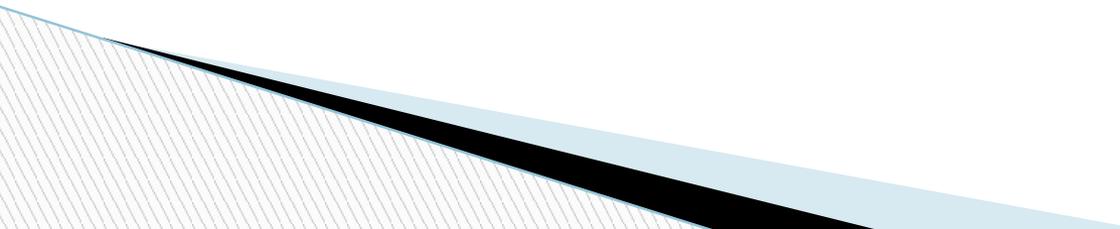
# Aural Hematoma

- ▶ Often results as a consequence from excessive head shaking and scratching.
- ▶ While the dog shakes its head and scratches insistently, over time, the small blood vessels will bleed inside the ear and cause notorious swelling causing the ear flap to fill up with blood. Ears will swell up like balloons or marsh-mellows and upon touching them they may feel squishy and odd.

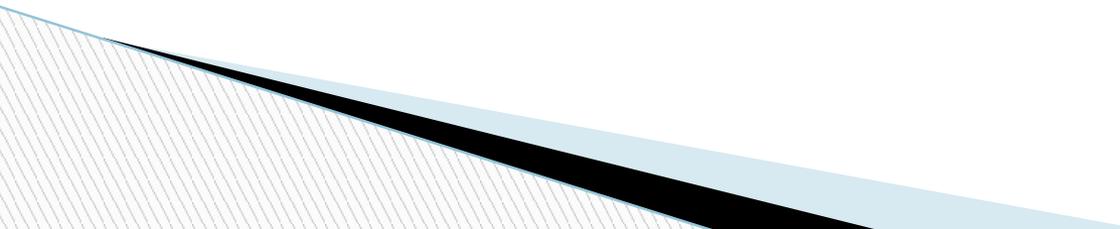
# Otitis

- ▶ Classic ear infection.
  - ▶ Can be external and internal.
  - ▶ Other than the classical head shaking and pawing, ear infections can be pretty painful.
  - ▶ May progress to the middle ear even leading to deafness should it go untreated.
  - ▶ Fortunately, a course of antibiotics is all it takes to give the dog comfort in most cases.
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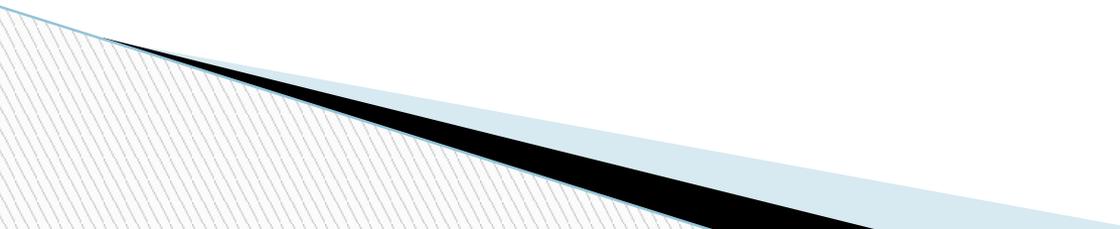
# Ear Mites

- ▶ While not really a disease, ear mites can potentially cause a disease.
  - ▶ These parasites live in the ear and can be detected thanks to the offensive odor coming from an affected ear and the discharge left behind.
  - ▶ A course of Tresaderm may be prescribed to get rid of these annoying parasites that may cause otitis.
- 

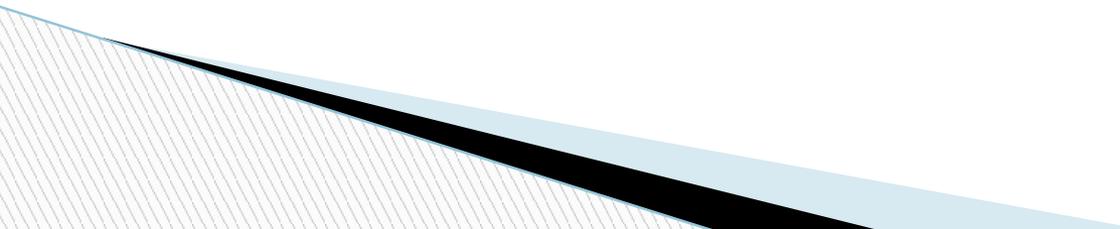
# Yeast Infections

- ▶ These may follow antibiotic treatments and typically cause a rancid odor, brown discharge, and very inflamed ears.
  - ▶ Anti-fungal treatments will be necessary treatment wise.
  - ▶ In mild cases the below home remedy of water and vinegar may be helpful
- 

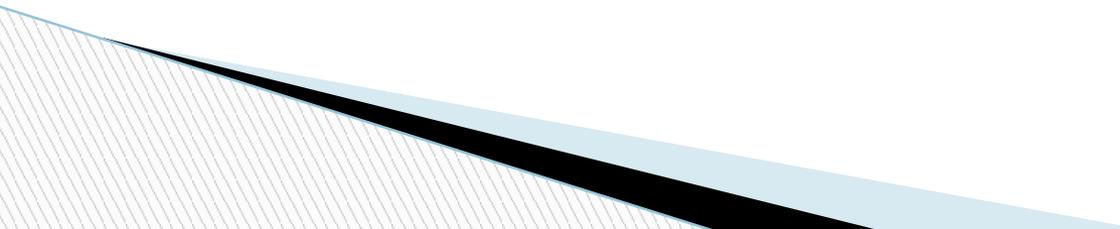
# Fly Bite Dermatitis

- ▶ Flies may insistently bite the dog's ears especially in those dog breeds characterized by erect ears. The ears of these dogs will appear with crusty brown-black edges.
  - ▶ The dermatitis that develops can be prevented by keeping the dog indoors or applying effective insect repellents.
- 

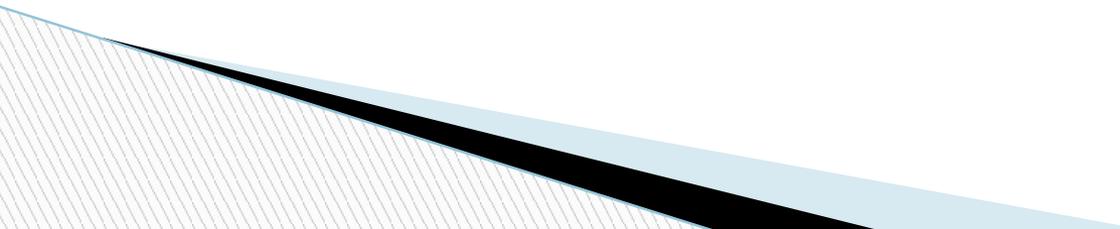
# Allergies

- ▶ Itching and pawing at the ears may be due to allergies.
  - ▶ Allergies may be caused by just about anything, foods, dusts, pollens, chemicals etc. Finding the triggering allergen may be challenging, yet not impossible. If food allergies are suspected a trial diet may help pin point the offending food.
  - ▶ Anti-histamines can bring relief and in worse cases corticosteroids and steroid shots may be necessary.
- 

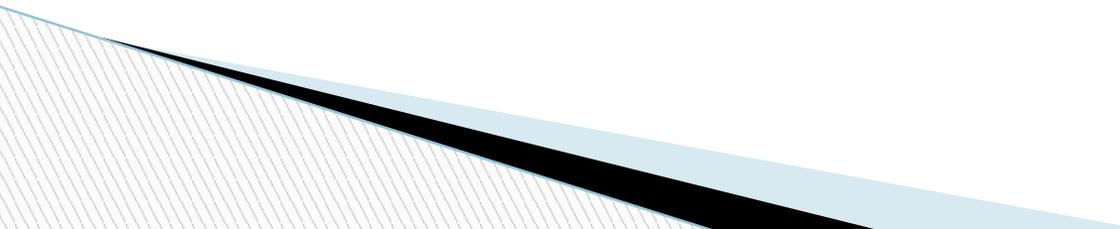
# Squamous Cell Carcinoma

- ▶ Form of cancer is worth mentioning due the increase of damaging ultra violet rays.
  - ▶ White dogs are particularly vulnerable and the ears are often a targeted area due to their exposure to the sun rays and their thin skin.
  - ▶ Your vet should prescribe sunscreen suitable for dogs to protect ears, muzzle and nose. Do not use human sun screen as some may be toxic for pets.
- 

# Labirintits

- ▶ This condition affects the inner ear, an area also responsible for a dog's balance.
  - ▶ It can occur when otitis progresses to the inner ear.
  - ▶ In such cases dogs develop dizziness, in-coordination, head tilt, and circling.
  - ▶ Medications can be prescribed to give relief from the dizziness though the underlying cause needs to be treated as well.
- 

# Prevention Tips

- ▶ Should you bathe a dog, remember to insert cotton balls in the ear to prevent moisture from turning the ear into the ideal host for bacteria or mites.
  - ▶ Floppy eared dogs need special care. Make sure the ears are kept clean and dry and inspect routinely for foreign matter.
  - ▶ Mats near the ear canal should be removed since they trap moisture inside
- 

# Inner Ear



Healthy

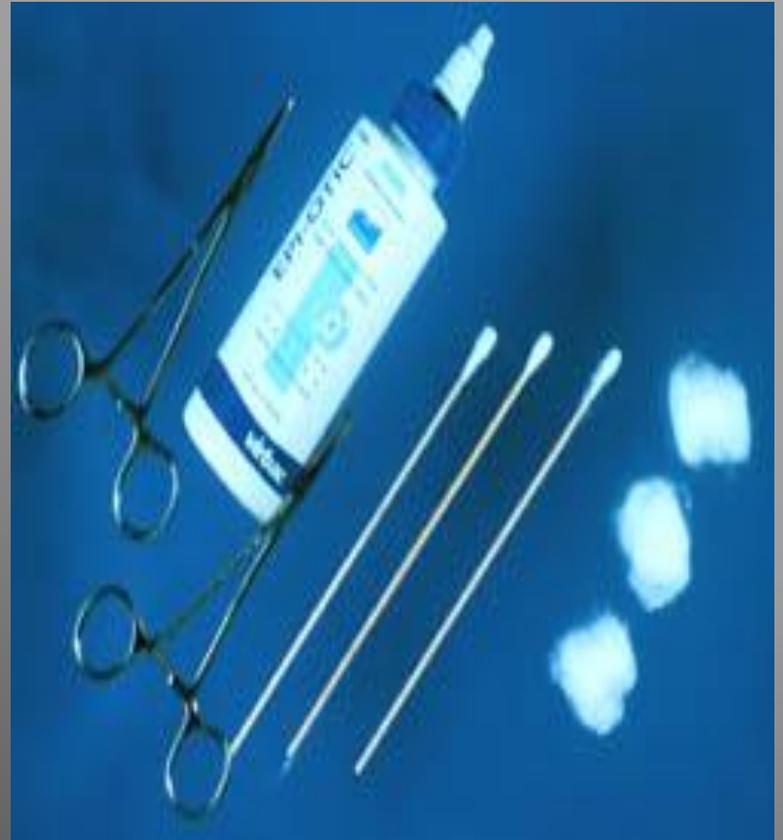


Infected

# Ear Cleaning Supplies

Ear cleaning can be accomplished with the following supplies:

- ▶ ear wash solution
- ▶ cotton balls
- ▶ a tweezers or hemostat to pluck hair
- ▶ q tips may be used if used properly



# Putting Drops in a Dog's Ear

- ▶ Lay the dog on his/her side. Reach over the neck with your left arm and firmly grasp the elbow of the leg closest to the table. Always hold the leg close to the elbow, NOT close to the toes. Keep your left elbow on the neck to prevent the dog from picking up his/her head.
- ▶ Use the fingers of your right hand to pull back the ear flap to expose the inner side of the ear. If the ear flaps are long, you can tuck the ear flap under your left elbow.
- ▶ Holding the medication bottle in your right hand, place the prescribed number of drops of medication into the ear canal.



# Ear Cleaning

- ▶ Ear cleaning solutions contain various chemicals and may contain drying agents. Check with your veterinarian regarding which product to use and how often to use it.
- ▶ **Excessive ear cleaning can be damaging to the ear.**
- ▶ If the "non-furred", inner side of the ear flap contains lots of fur at the opening to the ear canal, a few hairs can be plucked at a time. Lots of hair at the opening to the ear canal reduces air flow into the ear. Good air flow is important to maintaining a healthy ear

# Cleaning the Ear

- ▶ The ear wash solution is squeezed into the ear canal. A few drops of ear wash should be applied to the inside of the ear flap and then the tip of the ear. The bottle should be carefully inserted a few millimeters into the ear canal to place some of the wash solution down the ear canal.
- ▶ The dog will usually shake its head as soon as the wash is inserted into the ear, shaking out much of the solution.



# Cleaning the Ear cont.



Massage the base of the ear to distribute the solution.



Use cotton balls to remove the discharge from the ear flap

# Ear Medications



- ▶ Ear medications may contain several different drugs and may be ointments (pictured on the left) or drops (pictured on the right).
- ▶ Ear medications are most effective when placed in a clean ear. If they are placed on top of ear wax or other debris they will not be as effective.