

## Otitis in 3 Steps

1. Dirty – Waxy ears with minimal symptoms – itch or pain and rare occurrences
  - a. Clean the ears in the clinic if possible
    - i. EpiOtic Advanced best-safest product currently
    - ii. No acids, No alcohol, herbals
    - iii. Fill ear canal – let shake dry – repeat until clean
2. Otitis
  - a. Allergy or Endocrine disorder as the trigger
  - b. Mild non-infected otitis will eventually become infected
  - c. Treatment
    - i. Multimodal ointment (100s of products)
      1. Place in the ear every 24-72 hours
      2. Make sure volume is adequate: .5ml – 1.5 ml
      3. Use a syringe or pump bottle for easy dosing
      4. 1/10,000 ototoxicity rate
    - ii. Long-term Ear Pack
      1. LETK – lanolin, enrofloxacin, triamcinolone, ketoconazole
        - a. Must be warmed to prevent ear plug
        - b. Can be used every 1-2 weeks
        - c. Cheap but messy
      2. Osumnia and Claro
        - a. Same active ingredients
        - b. Osumnia is alcohol free bioactive gel
        - c. Claro is alcohol base with quicker kill
        - d. Both are effective for 2-3 weeks and can be repeated.
  - d. Prevention
    - i. Use which ever ear product at longer intervals
      1. Multimodal ointments use every 3-7 days
      2. Long-term Ear Pack use every 2-3-4 weeks
3. Severe purulent ulcerated and painful otitis
  - a. Usually mixed bacteria – cocci and rods – Pseudomonas, Proteus, Ecoli
  - b. Liquid purulent exudate and discharge
  - c. Painful, ulcerated ears
  - d. Tympanic membrane is usually ruptured but often can't see it anyway
  - e. Oral antibiotics do not achieve high enough concentration at the ear tissue
  - f. Severe swelling and pain may require 1 week of high dose steroids
  - g. Bacteria cultures are usually not necessary
  - h. TrisEDTA 4 oz with 1200mg enrofloxacin and 40 mg of Dex SP
    - i. Fill ear canal completely every 12-24 hours
    - ii. Should resolve infection in 2 weeks
    - iii. Then switch to prevention therapy
  - i. If not successful, consider culture guided therapy or TECA