## **Treatment**

- ♣ All primary and secondary causes and predisposing factors need to be identified, managed, and treated.
- ♣ Management of pain or pruritus must be included in the initial treatment protocol.
- ♣ Tramadol for the first 5–7 days at 5 mg/kg, PO, tid, may be especially beneficial.
- ♣ In addition, otitis externa is one of the few dermatologic conditions in which glucocorticoids are beneficial in the face of concurrent antimicrobial use or sepsis. Glucocorticoids decrease swelling of the ear canal and may be key to successful treatment.
- ♣ Prednisone or triamcinolone is used most commonly. Duration depends on the severity.
- ♣ Ear hygiene is important; in particular, the hair from the pre- and periauricular area should be clipped, as well as hair from the surface of the inner pinnae and ends of the ears. This facilitates cleaning and treatment of the ears.
- ♣ Plucking of hair from the ear canal is controversial but may be needed to adequately resolve the ear infection. Hair plucking is painful and should be done under anesthesia.

Effective treatment may require both topical and systemic antimicrobial therapy, along with pain medications and glucocorticoids. The duration of treatment may vary from 7–10 days to >30 days, depending on the diagnosis.

- ♣ In treatment of acute bacterial otitis externa, antibacterial agents in combination with corticosteroids reduce exudation, pain, swelling, and glandular secretions. The least potent corticosteroid that will reduce the inflammation should be used.
- Most commercial topical products contain a combination of antibiotic/antifungal and glucocorticoids.
- ♣ The volume of the ear canal in most dogs is 1 mL, and adequate treatment requires instillation of at least this volume twice daily.
- ♣ Products with an aqueous base or those that have a thin film should be used; ointments are to be avoided.
- ♣ Systemic antibiotics should be used when neutrophils or rod-type bacteria are found on cytology, in cases of therapeutic failure with topical antimicrobial agents, in chronic recurring ear infections, and in all cases of otitis media.
- ♣ Yeast infections in dogs can be treated with oral ketoconazole 5 mg/kg/day, PO, for 15—30 days. Ketoconazole should not be used in cats; itraconazole 2–3 m/kg/day for 15–30 days or one week on/one week off is recommended.

Successful treatment is multifaceted and should include the following steps:

- ♣ Remove the exudate via irrigation of the ear canal
- ♣ Identify and treat concurrent otitis media

- ♣ Select an appropriate antibiotic from the results of culture and mean inhibitory concentration on the organism and use it at an effective dosage for an appropriate duration
- ♣ Treat topically and systemically until the infection resolves (weeks to months).