Ear or Aural Abscesses in Turtles

Ear or aural abscesses are extremely common in box turtles and aquatic or semi-aquatic turtles like red-eared sliders.

What is an aural abscess?

The term "aural abscess" is actually misleading because ear abscesses in turtles are not pus-filled swellings. Instead a turtle ear abscess is a firm, cheesy plug that



can slowly develop within one or both middle ears. These swellings can become quite large.

What causes aural abscesses?

Low dietary levels of vitamin A can lead to abnormalities in the lining of the middle ear as well as problems of the skin, conjunctiva, eyelids, and even the respiratory tract. Once the middle ear is damaged, bacteria then invade causing infection.

How will your veterinarian manage the abscess?

Turtles with ear abscesses are often weakened. Your veterinarian will want to provide supportive care, in the form of heat, fluids, electrolytes, and nutrition, to make your pet stronger. Depending on the severity of disease, injections of antibiotics, pain relievers, and vitamin A may also be given.

The appearance of swelling over the ear is often enough to make your veterinarian suspect an abscess, but additional tests are sometimes needed to determine the best route of treatment and the prognosis. Testing can include:

- Culture to determine the best antibiotic choice.
- Cytology, or examination of an ear sample on a slide, to identify the type of bacteria involved.
- · Blood work to look for signs of systemic disease, and
- X-rays to look for infection involving the bone of the middle ear. Unfortunately the presence of bony infection means that disease will be much more difficult to resolve.

Treatment of the turtle ear abscess requires surgically opening the ear and removing the entire cheesy lump of debris.

Outpatient Care

If the surgical site is allowed to rapidly heal closed, there is considerable risk that the abscess will return. To allow the area to heal gradually and remove all remaining bacteria, your veterinary staff will show you how to manage the wound on a daily basis.

- 1. Flush the ear with a dilute antiseptic solution, dispensed by your veterinarian.
- 2. Gently fill the middle ear cavity with an antibiotic ointment or cream, dispensed by your veterinarian.

Even the very best wound management will not help if your turtle is not housed in an environment that will promote healing and a healthy middle ear lining. Make sure your turtle is....

- Fed adequate and appropriate dietary sources of **vitamin A** or betacarotenoids like yellow and orange vegetables or dark, leafy greens.
- Housed at an appropriate temperature range, which is needed for a healthy immune system.
- Provided with frequent water changes and water bowl disinfection.
 Bacteria that infect the ear are often swallowed in dirty water. These bacteria enter the middle ear through the Eustachian tube, a narrow tube connecting the ear with the oral cavity.

Follow-Up

Your veterinarian will want to recheck your turtle's ear before the opening seals over. More frequent recheck exams are often required when infection involves bone.

Fortunately most turtles with aural abscesses respond well to surgical treatment and heal completely. Abscesses can recur when underlying husbandry problems like temperature or dietary vitamin A are not addressed.

References

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