



THE CENTER FOR

BIRD & EXOTIC ANIMAL MEDICINE

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Dystocia/Egg Binding in Reptiles

Introduction

Dystocia is a problem that occurs in all species of reptiles. Snake, turtles and tortoises, and all types of lizards are susceptible, with some studies suggesting that it occurs in up to 10% of the captive reptile population. As Dystocia/Egg binding occurs both in live-bearing (ovoviviparous) as well as egg-laying (oviparous) species, no herp keeper is immune from it. This condition can be a serious problem and requires delicate and professional care, and in some cases, requires emergency treatment from a highly-qualified veterinarian. Unfortunately, some reptiles can succumb in spite of the best care.

Cause

Infection, trauma to the reproductive tract, inadequate nesting area, excessive egg laying, obesity, nutritional problems and infection are some of the factors involved with this problem. "First clutch" individuals appear to be more prone to dystocia, as are reptiles that have been heavily bred for many clutches. Determining the exact cause can be difficult. There are specific tests that can be done to help determine the cause(s); serum chemistries, ionized calcium levels, radiographs, cultures, and biopsies are all excellent first-line tests depending on the presentation of the species and animal presented.

Symptoms

Reptiles that have this problem might exhibit depression, weakness, seizures, labored breathing, straining, aggression, coelomic distention or masses, lack of feces production and poor appetite. There might even be broken bones or a soft shell due to low calcium levels in the blood. These are also the presentation signs of other reptile diseases so it is important to not ignore seemingly minor, easily missed symptoms. Sometimes the only symptom is your herp sitting at the bottom of the cage, lethargic. Unfortunately, the only symptom in some cases is a dead animal.

Diagnosis

In many egg bound reptiles there may be a history of recent egg laying. However, it is important to remember that there does not have to be breeding or even exposure to a male for a female herp to produce and attempt to lay eggs. During physical examination of a reptile with a distended coelom an egg can sometimes be palpated but in many species of lizards and most chelonians even multiple eggs can be easily missed by an experience examiner. There are other

causes besides egg binding in reptiles with distended coeloms, so it is important to follow a thorough diagnostic process.

X-rays are a significant aid in making this diagnosis, but only if the eggs are well mineralized and have not ruptured. Some eggs from many species of herps or in certain disease conditions are poorly calcified and do not show up well on a radiograph.

Treatment

Egg bound reptiles can range from stable and non-emergent (but still are very ill and require medical care within 24 hours) to very critical and requiring emergency care. They can be toxic from the inability to eliminate waste products and dehydrated from poor appetites and weakness, so fluids may need to be administered. If electrolyte levels are found to be abnormal, calcium may be administered to aid in muscle contractions and hopefully expulsion of the egg on its own (with caution, as calcium overdoses can be toxic). Hormones that stimulate the uterus to contract may be given in certain species but are not effective in all reptiles. Whether or not any specific medical therapy may work depends on the cause of the problem, how long since the problem started, and even the species in question.

If medical therapy does not or cannot work the egg must be removed. Manual removal (palpation and pressure to express the egg) is generally not advisable, as eggs, when unable to pass normally, often bind to the uterine walls and reptile uterine walls are very thin and easily torn. In some cases, it may be appropriate to insert a catheter directly into the egg to collapse the egg and make expulsion easier, while in other cases an endoscope may be able to be used to both aspirate the egg as well as grasp it directly and extract it. Surgery, however, is required in many cases where the eggs cannot leave the oviduct (POOS syndrome), have been released into the coelom rather than the uterus, or where the egg(s) have ruptured (coelomitis). Assessment by a trained reptile veterinarian will determine what the best course of action will be to help your pet.

Prevention

There are factors involved with this problem that we have no control over. Factors we can control are good nutrition, a clean environment, spaying reptiles that are predisposed to egg binding or are excessive egg layers, minimizing obesity and stimulating exercise. Annual examinations for both general health as well as parasites can help to reduce the risks of dystocia.

Careful daily observation of your reptile's daily habits will help you recognize the early symptoms of this disease. **No matter what the problem, any time your pet reptile shows any symptoms of a disease, no matter how subtle, it is considered significant and requires immediate veterinary care.** This is because reptiles are still at heart wild animals and masters at hiding illness, and veterinarians are all too often presented with sick herps in advanced stages of disease. Our ability to return these animals to normal health is diminished because proper care has not been given early on in the disease process where it is most beneficial.