

CASE REPORT

Egg Binding in an Iguana

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A 2-year-old female green iguana (*Iguana iguana*) was presented for abdominal swelling and a decreased appetite of 1-month's duration. The iguana was housed alone in a small bedroom with a basking area that had a broad-spectrum light above the food bowl. The room was kept at 74°F (23.3°C), and the area under the basking light was approximately 90°F (32.2°C). The diet consisted of a variety of greens, other vegetables, and fruits. A multivitamin was placed on the food 2–3 times a week. On physical examination the iguana was bright and alert with a moderately distended abdomen. Round masses were palpable in the mid-coelomic area. A radiograph revealed multiple round masses with soft tissue opacity arranged in a grape-like cluster. These masses were suspected to be pre-ovulatory eggs. Because the animal was alert and active, it was decided to increase the calcium in the diet by giving 25 mg/kg of calcium gluconate PO q12hr and to increase the environmental temperature to 100°F (37.7°C). It was also recommended to position the broad-spectrum light so that the animal was within 12 inches of it during most of the day.

The animal did well for the next 4 weeks, and its abdomen became progressively larger. The iguana then became depressed and anorexic. The owner reported that the iguana had suffered a fall from its perch a few days before the signs began. A physical examination showed that the

coelomic swelling had become greater and progressed caudally. Coelomic palpation appeared to elicit pain. A radiograph showed similar round masses, none of which were calcified, and there was decreased detail in the entire coelom. An ultrasound revealed a mild coelomic effusion and many follicles.

Abdominocentesis was performed, and a small amount of yellow material was collected. A Diff-Quick brand stain showed toxic heterophils and monocytes with globoid, deeply basophilic material. No bacteria was seen. It was determined that the iguana had egg yolk peritonitis, and surgery was recommended.

Anesthesia was induced with propofol (10 mg/kg IV) using a 25-gauge butterfly needle inserted into the tail vein of the iguana. A 3.0 ID endotracheal tube was then placed in position, and anesthesia was maintained with isoflurane. A paramedian incision was made into the coelom to avoid the ventral abdominal vein, located on the midline. Many pre-ovulatory follicles were found, some of which had ruptured and released approximately 8 mL of yolk material into the coelom. An ovariosalpingectomy was performed. The ovarian vessels were ligated with hemoclips; two clips were placed at the uterus (shell gland) which was then transected and removed. The coelom was lavaged with a small amount of sterile saline, and all the yolk material that could be visualized was removed. The muscle was closed with 3-0 polydioxanone suture in a simple

continuous pattern, and the skin was closed with 3-0 nylon in an everting pattern using a horizontal mattress suture pattern. The everting pattern allows apposition of skin for optimal healing. Scale to scale contact delays healing.

The iguana recovered well and was placed on piperacillin (100 mg/kg IM q48hr). The skin sutures were removed after 4 weeks.

Dystocias can occur in iguanas regardless of the presence of a male. The dystocia may be pre- or post-ovulatory. Pre-ovulatory dystocia involves the failure of ovarian follicles to ovulate. A post-ovulatory dystocia occurs after the eggs have been shelled but before they are oviposited. It can be difficult to distinguish normal gravidity from egg binding because iguanas normally do not eat during much of the gravid state and appear very distended. In general, if a lizard is not sick, then the animal is probably normal and medical management or husbandry changes can be made. If a lizard appears sick, immediate intervention is recommended. Pregnant iguanas should be kept in a cage with low or no climbing branches to avoid trauma from falling.