

Applicant's name: Best Tech Ever, LVT

Case log # 66

Date September 1, 15, October 1,15, 2021 **Patient ID** 14-20-70^[11]_[SEP] **Species** Reptile – Green iguana (*Iguana iguana*)
Age 2 yrs **Sex** F **Wt** 2.3 kg^[11]_[SEP] **BCS:** 3/9 **Pain Score:** Severe

Diagnosis: Hypocalcemia, malnutrition, chronic dehydration, nutritional secondary hyperparathyroidism.

Treatment Plan: Hospitalize and provide supportive care including: SC and ICe fluid therapy with lactated Ringer's solution (LRS) 57.5mls (25ml/kg/day), soaking in an 85°F shallow water bath Q12H, nutritional support via gavage feeding Oxbow Critical Care® for herbivores (40 kcal/day), thermal support by housing in an incubator kept between 75°F and 85°F with a humidity of 80%-90%, calcium gluconate 230mg (100mg/kg) IM Q24H, vitamins A 2300IU (1000IU/kg) IM once, D₃ 230IU (100IU/kg) once, E 2.3IU (1IU/kg) IM once, and hydromorphone 1.15mg (0.5mg/kg) IM Q24H. Client education regarding diet and husbandry changes.

Advanced skills & procedures performed: Large lizard restraint. Lizard venipuncture of the caudal tail vein using the ventral approach (12). Submission of blood to external laboratory for CBC and plasma biochemistry panels (55). Administration of SC and ICe fluids using a 22g, 1" butterfly catheter (23). Preparation of a warm water bath and monitoring of patient during soak time. IM administration into the bicep of hydromorphone, calcium gluconate and vitamins (23). Gavage feeding via an 8fr red rubber catheter (18). Monitoring and recording of vital signs such as HR via Doppler probe, RR and urate, urine, and fecal output (21). Maintenance of nursing notes in medical records (84). Positioning and determination of technique for whole body radiographs including a horizontal right laterolateral and standard dorsoventral view (61, 62, 63, 64, 67). Fluid therapy and drug calculations. (10, 11) Evaluation of diagnostic reptilian whole body radiographs (64). Client education regarding diet and husbandry changes (2,4) Billing of charges. Following up with client via phone calls regarding patient status (4).

Final Outcome: The patient presented on emergency with a 3-day history of tremors, anorexia, lethargy, and general malaise. On physical examination, the patient was alert and responsive with a subjective pain score of severe. Heart rate (HR) was 60 beats per minute (BPM), respiratory rate was 4 breaths per minute (BPM), and body condition score (BCS) was 3/9. She was estimated to be 5% dehydrated. The patient exhibited signs of nutritional metabolic bone disease including a pathologic fracture of the right femur, muscle fasciculation, weakness, and osteomalacia. CBC and biochemistry evaluations revealed an increased PCV 65% (25%-38%), hyperuricemia 4.2mg/dL (1.2-2.4 mg/dL), hyperphosphotemia 12.2mg/dL (4-6 mg/dL), hypocalcemia 5.2mg/dL (8.8-14.0mg/dL), and ionized calcium 0.95mmol/L (1.37-1.57mmol/dL). Radiographs revealed a pathologic healed fracture of the right femur and decreased calcification of the bones. No treatment was recommended for the healed fracture. Due to hyperuricemia, the analgesic meloxicam was not chosen. The patient was hospitalized for 4 days to administer supportive care as previously described. When discharged, the client was educated about appropriate green iguana husbandry including: appropriate diet of dark leafy greens, brightly colored vegetables, small amounts of fruit, and calcium/dietary supplements, temperature and humidity requirements in the enclosure, the importance of daily misting and bathing, proper hygiene including daily cage cleaning, incorporating appropriate cage furniture, plants, substrate, and the importance of UVB lighting. The patient was sent home with calcium glubionate 115mg (50mg/kg) PO Q24H X90d and tramadol (10mg/kg) PO Q24H X14d.

The patient returned two, four, and six weeks after initial hospitalization. The owner reported making the necessary husbandry and dietary changes and that the patient was doing very well at home. The owner planned to return for a follow-up appointment and agreed to continue giving the oral calcium supplement until that time.

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