



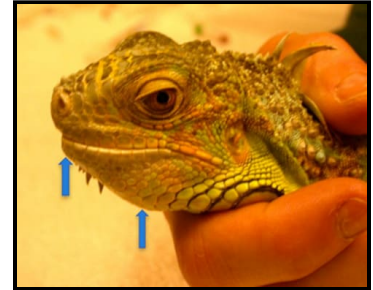
Top 10 Reptile Diseases Part 1

5 Of The Top 10 Reptile Diseases To Know For NAVLE® Success:

1. Metabolic bone disease (MBD)

o **Classic case:**

- "Bent iguana" (pathologic fractures) OR
- Progressive weakness in a young reptile OR
- Swollen limbs from fibrous osteodystrophy
- History of a deficient diet (unsupplemented lettuce, ground meat, mealworms, crickets)



Green iguana with a swollen and shortened jaw from MBD

o **Dx:**

- Physical exam: distorted, rubbery mandible
- Radiography: poor mineralization, greenstick fractures
- Low plasma 25-dihydroxycholecalciferol
- Later see hyperphosphatemia and hypocalcemia

o **Rx:**

- **CRITICAL:** Correct diet and lighting
 - Dietary Ca:P = 1.5-2.1
 - Unfiltered sunlight or full spectrum light (UVB) needed for vitamin D3
- "Gut-load" whole prey (prey supplemented with calcium or calcium/vit D)
- Calcitonin: only if normocalcemic

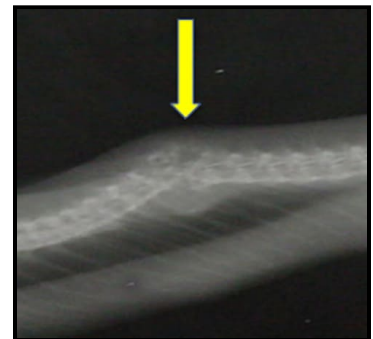
o **Pearls:**

- Prognosis is fair to good if caught early, but poor if hypocalcemia and bone loss
- Renal secondary hyperparathyroidism can occur in older animals with end-stage renal disease
 - Present with inability to move and muscle fasciculations

2. Salmonellosis

o **Classic case:**

- Reptiles AND amphibians are often carriers, shedding bacteria in feces
- May see septicemia, osteomyelitis, abscesses



Pathologic fracture in a snake with chronic salmonellosis

o **Dx:**

- Culture (abscess or blood)
- Biopsies
- Radiographs: vertebral infection in snakes
- Necropsy: acute enteritis or necrotizing fibrinous enteritis

o **Rx:**

- Debridement
- Systemic antibiotics if septicemic (may increase emergence of resistant strains)
- Supportive care
 - Fluids
 - NSAIDs

o **Pearls:** ZONOTIC concern

- Red-eared slider turtles illegal to sell if under 4 inches of shell length (can fit in child's mouth)
- Practice good hygiene after handling reptiles or amphibians, enclosures, and their food

- Children under 5, the elderly, and people with compromised immune systems are at high risk of infection
- Etiology: Usually *S. bongori* or *S. enterica*

3. Dysecdysis (retained shed)

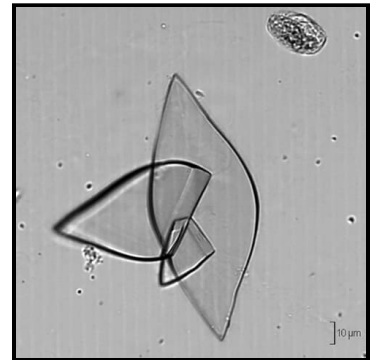
- **Classic case:**
 - Snakes with retained or partially shed skin
 - Lizards: see over feet and toes, can constrict distal toes and tail tip
- **Dx:**
 - Physical exam
 - Rule out underlying disease
- **Rx:**
 - Soak animal prior to assisting shed
 - Be careful with retained spectacles, can damage cornea
 - Treat underlying disease
- **Pearls:**
 - Environment may be too dry or poor nutrition
 - Subspectacular abscesses can occur between cornea and spectacle
 - Exuvium is the shedded whole skin (snakes)
 - Lizards shed in pieces



Retained spectacles

4. Gout

- **Classic case:**
 - Visceral: obtunded, weak, dehydrated
 - Primary is caused by excess dietary protein
 - Secondary is due to dehydration or renal disease
 - Articular: swellings, white nodular tophi (urate-centered granulomas) around appendicular joints, PAINFUL
 - Rare to have both types in one animal
- **Dx:**
 - Increased blood uric acid levels
 - Radiographs show mineralized tophi in organs or joints
 - FNA of joints: see needle-shaped crystals
- **Rx:**
 - Rehydration/abundant access to water, vitamin supplementation, analgesics
 - Primary visceral: decrease dietary protein; try to approximate diet of reptile's natural habitat
 - Secondary visceral: treat underlying disease
 - Medical Rx is challenging, poorly understood & takes cues from human protocols
 - Allopurinol, may decrease uric acid production (debated)
 - Probenecid, to promote urate excretion
 - Colchicine/corticosteroids to manage acute gouty arthritis attacks
- **Pearls:**
 - Prognosis is poor
 - Pseudogout occurs in turtles, with mineral deposition (not urate) in and around feet



Uric acid crystals in gout

5. Hemipenal and phallic prolapse

- **Classic case:**
 - Prolapsed structure, unable to retract
 - Vulnerable to trauma during mating
- **Dx:** Physical exam
- **Rx:**
 - Hypertonic topicals, lubricants, and reduction
 - Surgical amputation: phallus and hemipenes have no urethra
- **Pearls:**

- Single phallus in crocodylians and chelonians
- Paired hemipenes in lizards and snakes
- Oviduct prolapse can occur in females when straining to pass eggs: SERIOUS



Images courtesy of [Haley Luna](#) (Kevin the tortoise), Jean A. Paré, DVM, DVSc, DACZM (MBD, snake spine, retained spectacles, prolapsed hemipenes), and [Doruk Salanci](#) (uric acid crystals).



Red-tailed boa with bilateral hemipenal prolapse