

# COMPANION ANIMAL

## EXOTICS



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## PSITTACINE MEDICINE

### Husbandry

- Cages
  - Size (recommend one size up)
  - Materials – zinc? (Galvanized metal/wire)
  - Perches (mansanita wood, concrete)
  - Toys (Bird safe)
  - Substrate (newspaper)
- Nutrition
  - Not intuitive?
  - Seed based diets vs. pelleted diets
  - Supplementary foods especially calcium
  - Foods to avoid: chocolate, alcohol, high fat foods, avocado, and grit or gravel supplements. (ANY processed foods)

### Husbandry

- Issues with free-flighted birds:
  - Defecating all over the house
  - Destructiveness
  - Lead paint (lead toxicosis )
  - Poisonous household plants
  - Smashing into windows, ceiling fans etc.
  - Flying into boiling water on a stove
  - Aggression from other bird
  - Escape!

### Important Nutritional Diseases of Psittacines

- Vitamin A deficiency
  - Squamous metaplasia
- Calcium/phosphorus imbalances
  - Egg binding, pathological fractures, unthriftiness
- Hypocalcemia of African Grey parrots

- Vitamin E deficiency
- Iodine responsive goiter
  - Budgerigars
- Obesity & Fatty liver syndrome
  - High fat diet, limited exercise
  - Hepatic lipidosis crisis possible with anorexia

### Case: African grey parrot

- Signalment & History
  - 12 year old parrot in the family since a young bird.
  - Kept in the family room, active lifestyle, but not handled much
  - Diet: complete pellet/seed mix and occasional table scraps, calcium supplement available

### Case: African grey parrot

- Chief complaint: eating less, not as vocal, moving tongue around funny? Strange mass under the chin
- Physical exam: BAR, slightly thin, dry skin
  - Firm, non pigmented, non-mobile mass under chin.
  - Base of tongue also seems swollen.
- Signalment & History
  - 12 year old parrot in the family since a young bird.
  - Kept in the family room, active lifestyle, but not handled much
  - Diet: complete pellet/seed mix and occasional table scraps, calcium supplement available

### Vitamin A deficiency in pet birds

- Seeds have no Vitamin A
- Foods high in vitamin A

Broccoli

Carrots

Collared greens

Yellow corn

Cantaloupe

Peaches

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Vitamin A deficiency

*Squamous metaplasia*

- Respiratory tract
- GI tract
- Urinary tract
- Reproductive tract

Vitamin A deficiency

- Diagnosis
  - Dietary history
  - Clinical signs
- Treatment
  - Correct diet
  - Vitamin A injection
  - Surgery if necessary
- Prevention
  - Ensure adequate dietary sources of Vitamin A
  - Discuss nutrition on post purchase exam !

Hypocalcemia of African Grey parrots

- Etiology recently published
  - UV light
- Hypocalcemia with little or no osteoporosis
- Acute presentation but insidious
  - weakness, falling, poor feathers, tetany/seizures
  - A true emergency!
- Diagnosis
  - clinical signs
  - serum Ca levels
    - Need to measure ionized Ca not total Ca!!
      - Use NOVA analyzer!
  - radiographs

NOT diagnostic

- Treatment & prevention
  - Ca supplementation (lifelong!)
  - UV-B lighting

Obesity, Fatty liver syndrome

- Diagnosis
  - PE, clinical signs, diet, serum chemistry, radiographs, liver biopsy?
- Treatment
  - Dietary management, increased exercise
- Prevention

Hepatic lipidosis ACUTE TOXEMIA

- Brought on by starvation!
- Metabolic emergency
  - Anorexia, depression, dyspnea, ataxia, vomiting
- Nutritional support
  - high carbohydrate
  - low fat
- Fluid support
- Lactulose to avoid more complication such as hepatoencephalopathy
- Liver support (choline, methionine, inositol, vit b complex)

Important Infectious Diseases of Psittacine Birds

- Avian paramyxovirus or Newcastle Disease
- Herpes virus (Pacheco's Disease)
- Adenovirus
- Reovirus - new outbreak in Budgies
- Psittacine Beak and Feather Disease
- Psittacine Pox
- Proventricular Dilatation Syndrome

Spontaneous Bacterial Respiratory Diseases in Psittacines

- Stress associated disease

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## EXOTICS

- Overgrowth of common commensals
- Underlying Vitamin A deficiency

### Clinical signs

- sneezing
- nasal discharge
- dyspnea
- lethargy
- anorexia
- exercise intolerance

### Spontaneous Bacterial Respiratory Diseases in Psittacines

#### Differential diagnosis

- viral respiratory diseases
- chlamydiosis
- toxic inhalants
- fungal disease
- allergies
- abdominal compression (mass effect)

### Diarrhea case work-up

- Case presentation:
  - Sudden onset diarrhea
  - Weight loss, anorexia, dehydration ...
  - Change in color?
  - Foul odor
- Initial workup?
- Stress associated disease
- NOT necessarily contagious
- Overgrowth of common commensals (especially gram negatives)
- We want 80-90% G + and the rest G -, no yeasts

### Clinical signs

- diarrhea
- dehydration
- anorexia
- weight loss
- septicemia
- sudden death

### Rule outs

- dietary indiscretion
- hepatitis
- Chlamydiosis
- intestinal parasitism

### Lead Poisoning

- Most common toxin seen
- Chronic form
- Acute form
- Clinical signs
  - anorexia
  - diarrhea or GI stasis
  - vomiting
  - PU/PD
  - hematuria

### Diagnosis

- history
- clinical signs
- CBC
- radiographs
- blood lead levels

### Zinc toxicosis

- "New wire disease"
- Galvanized metals
- Clinical signs similar to lead
  - plus pancreatic involvement

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- Diagnosis – serum zinc levels
- Treatment » CaEDTA, Succimer
  - Supportive care, especially renal function

### Chronic egg laying

- Cockatiel
- Causes....
- Complications:
  - Exhaustion
  - Calcium depletion
  - Egg binding
  - Salpingitis, etc.

### Egg binding in pet birds

- Cockatiels, budgies, finches, others
- Role of calcium
- Other causes
  - Chronic egg laying
  - Vitamin A deficiency
  - Poor condition
  - Young hen
  - Large egg
  - Anatomical problem

### Clinical signs

- Nesting behavior
- Straining
- Fluffed, depressed, lethargy
- Abdominal swelling

### Treatment

- May be emergency
- Medical therapy:

### lubrication

Oxytocin

### Calcium

### PGE

- Surgical therapy as last resort

### Neoplasias

- Many!
  - Squamous cell carcinoma
  - Lymphoma
  - Fibrosarcoma
  - Lipoma/xanthoma
  - Papilloma
  - Gonadal tumors (budgies)
  - Etc.

### The clinical signs of a kidney tumor

### Summary

- Most diseases in pet birds are somehow related to husbandry mistakes.
- Make sure you educate the owners before it is too late.
- Avian medicine is preventative medicine.
- Learn some species specific presentations, be prepared for appointment.