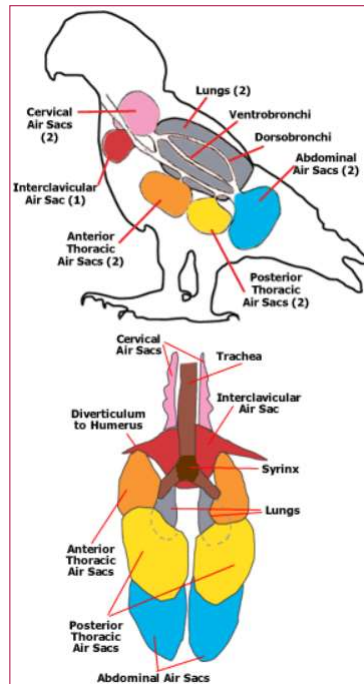
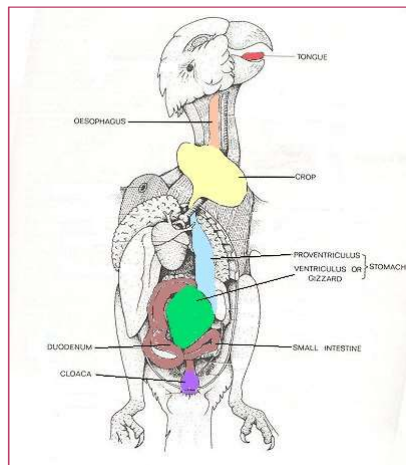


PET BIRD MEDICINE

Dr. Rachel Chang BVSc, BAnimSci

BASIC ANATOMY



HUSBANDRY, HUSBANDRY, HUSBANDRY!!

- ◉ Appropriate diets:
 - Ideally good quality pellet, but seed is alright if no other option
 - Daily access to vegetables and fruits
 - For ducks and chickens – also daily access to small insects (i.e. slugs, snails, etc) for protein
- ◉ Cage equipment and size:
 - Metal toys
 - Rope toys
- ◉ Enrichment – these are intelligent birds, think brain capacity of toddlers

DIET

- ◉ Ideally should be 30% greens (veggies, grass, sprouts), 30% pellet, 15% fruit, 10% seed, 5% treats
- ◉ Vegetables:
 - Mostly dark leafy greens, e.g. spinach, broccoli, bok choy and other Asian greens, any dark green lettuce, endives, silverbeet
 - Yellow/red vegetables, e.g. capsicum, carrots, tomatoes, corn, chilli
- ◉ Fruits: apple, orange, grapes, pear, mango, and banana

DIET

◉ Beans/Legumes:

- Many beans can be toxic to feed raw so be careful with recommending
- The following are fine to feed raw or cooked – chickpeas, lentils/dhal, mung beans, alfalfa

◉ Sprouts/Grass:

- Barley, ryegrass, velvet grass, dandelion, chickweed are all fine to feed
- Make sure they are pesticide free!

DIET

◉ Pellets:

- Ideally want a good brand of pellet
- Vetafarm, Harrison's, Passwell, Roudybush

◉ Seeds:

- Fine to give if pellets not available
- No more than 40% of diet
- NO SUNFLOWER OR SAFFLOWER SEEDS

◉ Treats:

- Nuts – i.e. almonds
- Little pieces of white meat, roti/naan, brown rice

TOXIC FOODS TO AVOID

- ◉ Avocado
- ◉ Rhubarb
- ◉ Onion
- ◉ Garlic
- ◉ Most uncooked beans and legumes
- ◉ Chocolate
- ◉ Caffeine
- ◉ High fat foods
- ◉ Salted foods

CAGE SIZE AND POSITIONING

- ◉ Minimum size:
 - Large enough to stretch wings without touching sides
 - Large enough sit on a perch without tail touching floor
- ◉ Large enough to allow grooming, playing and moving
- ◉ Longer cage better than thin and high
- ◉ Ideally place on a stand at head/chest height

ENRICHMENT

- ◉ Variety of food – mix up diet
- ◉ Chilli/Capsicum:
 - Love playing with seeds
 - Cannot taste hottness of chilli
- ◉ Foraging toys:
 - Ideally untreated wood and paper
 - Can make foraging boxes out of cardboard/newspaper
- ◉ Do not use metal or rope toys!

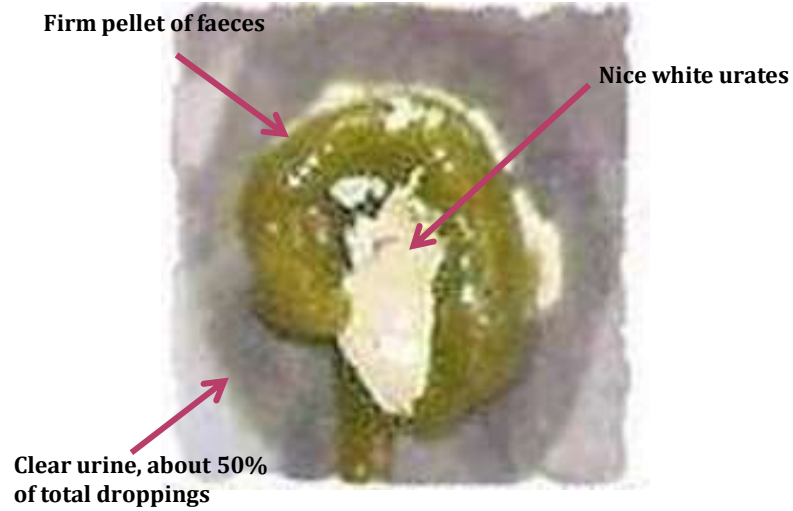


BLOOD COLLECTION

- ◉ Jugular, wing and leg vein are best
- ◉ Only take 10% of bird's bodyweight – i.e. if 30 g bird, take maximum of 0.3 ml

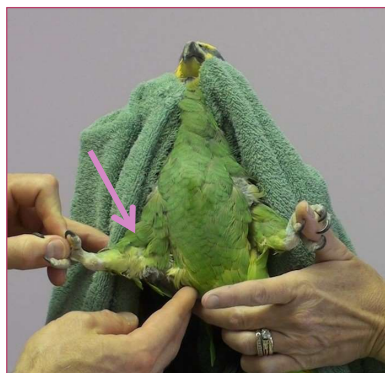
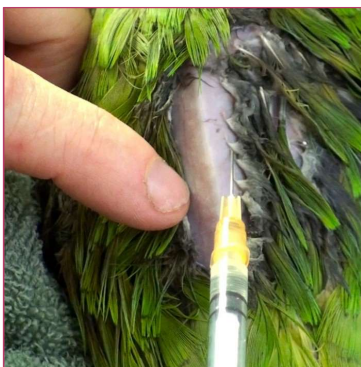


NORMAL BIRD FAECES



INJECTION SITES

- ◉ Most medications are given IM – best location is pectoralis muscles
- ◉ Subcutaneous fluids – into leg skin fold



ANAESTHESIA

- ◉ Fast for 3-4 hours before – much quicker metabolism
- ◉ Birds breathe through lungs and air sacs!
 - Ideally keep in lateral/ventral recumbency
 - If in dorsal, need manual ventilation
- ◉ ACTIVE HEATING - birds get cold very quickly
- ◉ Ideally short – try to be <40 minutes
- ◉ Try to plan procedures and do as much as possible

ANAESTHETIC DRUGS

- ◉ Inhalation:
 - Isoflurane and sevoflurane are excellent
 - Avoid halothane!
- ◉ Injectable:
 - Can use as IM pre-medication or IV induction
 - Midazolam/Butorphanol
 - ◉ Midazolam: 1-2 mg/kg
 - ◉ Butorphanol: 1-4 mg/kg
 - Midazolam/Ketamine
 - ◉ Ketamine: 20-30 mg/kg

EXAMPLE ANAESTHETIC PROTOCOL

- ◉ Pre-medicate with midazolam/butorphanol, or just butorphanol IM
- ◉ Pre-oxygenate for at least 5 minutes, can do in O2 tent, or by mask
- ◉ Induce with gaseous isoflurane by mask
- ◉ Maintain on mask, or via very small, NON-CUFFED endotracheal tube
- ◉ Time anaesthetic procedure for 30 mins maximum
- ◉ Recover in heated O2 tent

CROP FEEDING



“SICK BIRD” LOOK



CHLAMYDIOSIS

- ◉ Caused by *Chlamydophila psittaci*
- ◉ Affects multiple birds species
- ◉ Most common in parrots
- ◉ ZONOTIC – psittacosis in humans!!

◉ Clinical Signs:

- Ocular/nasal discharge
- Sneezing
- Green urates
- Weight loss
- Lethargy



CHLAMYDIOSIS

- ◉ Stress-activated infection
 - Young birds can be carriers
 - Younger bird = lower immunity
- ◉ Diagnosis:
 - Clinical signs
 - Immunocomb/PCR testing (immunocomb negative for budgies)
- ◉ Treatment:
 - Supportive care – fluids/meloxicam
 - Doxycycline – 100 mg/kg IM weekly for 6 weeks

TOXICITIES – HEAVY METAL

- ◉ Usually birds with a history of chewing on metal toys in cages
- ◉ Most common toxicities – zinc, lead
- ◉ Metal accumulates in stomach
- ◉ Clinical signs:
 - Weakness
 - Ataxia/Paralysis
 - Seizures
 - Bright green faeces
 - Vomiting



TOXICITIES – HEAVY METAL

- ◉ Metal fragments on radiography



TOXICITIES – HEAVY METAL

- ◉ **Diagnosis:**
 - Clinical signs
 - Metal fragments in stomach on x-ray
- ◉ **Treatment:**
 - CaEDTA (lead & zinc) – 30-50 mg/kg IM q12
 - DMSA (lead) – 25-35 mg/kg PO q12-24
 - D-Penicillamine (copper, most metals) – 30-50 mg/kg PO q12
 - Fluid therapy – 60 ml/kg SQ q6-12
 - Crop feeding
 - Supportive therapy for liver:
 - Silymarin (Milk thistle) – 50 – 75 mg/kg PO q12
 - Colchicine – 0.04-0.2 mg/kg PO q24



FOREIGN BODY INGESTION

- ◉ Most commonly from rope toys
- ◉ Occasionally plastic
- ◉ Chickens will eat anything...

- ◉ **Clinical Signs:**

- Vomiting
- Straining to defecate
- Diarrhoea
- Lethargy
- Inappetance



FOREIGN BODY INGESTION

- ◉ **Diagnosis:**

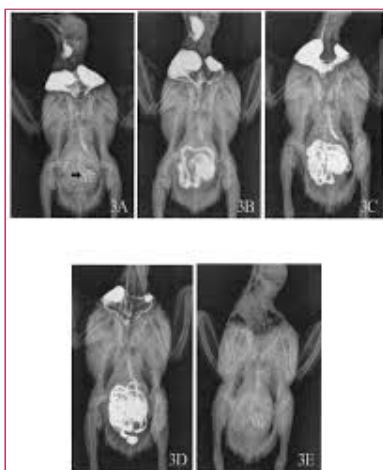
- Radiographs – barium study if possible
- Coelomic palpation
- Fragments in droppings

- ◉ **Treatment:**

- If small object + large bird, can sometimes retrieve endoscopically
- If in crop – surgical removal
- If large blockage – recommend euthanasia

FOREIGN BODY INGESTION

- ◉ Barium study for foreign body obstruction



EGG BINDING

- ◉ Egg blocks oviduct
- ◉ Sometimes egg is too big, sometimes, due to muscular/nutritional issue
- ◉ Causes include:
 - Chronic egg laying,
 - Oviduct muscle dysfunction
 - Calcium deficiency
 - Malnutrition & obesity,
 - Inadequate exercise and muscle strength
 - Other reproductive issues

EGG BINDING

◉ Clinical Signs:

- Lethargy/Depression
- Straining
- Wide stance
- Abdominal distension
- Dyspnoea

◉ Diagnosis:

- Radiographs
- Palpation of egg



EGG BINDING

◉ Treatment:

- Prostaglandin gel to sphincter – 0.1 ml/100 g bird
- Calcium gluconate – 10-100 mg/kg IM, dilute with saline
- Fluid therapy
- O₂ if respiratory distress

◉ Surgical Correction:

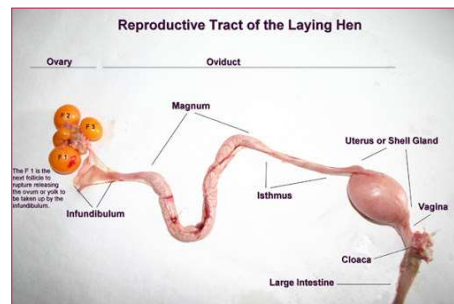
- Transabdominal oocentesis and collapsing egg
- Very tricky procedure
- Worst case scenario

EGG BINDING – TRANSABDOMINAL OVOCENTESIS



EGG YOLK PERITONITIS

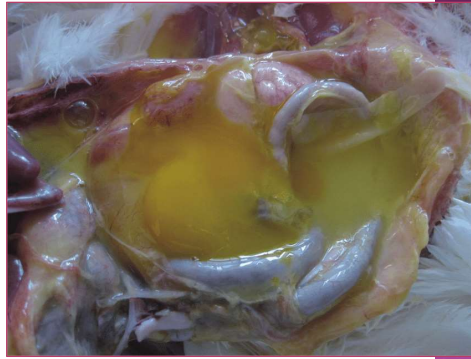
- ◉ Commonly seen in chickens, especially Isa Browns
- ◉ Certain breeds designed for egg-laying only
- ◉ >1.5 yrs, develop reproductive issues
- ◉ Ovum “misses” the oviduct and goes into the coelomic cavity



EGG YOLK PERITONITIS

◉ Clinical Signs:

- Lethargy
- Pale comb/wattle
- Wide-based stance/Penguin walk
- Large abdomen
- Inappetance



◉ Testing:

- Abdominocentesis – can pull out yolk
- X-ray – fluid opacity in coelom

EGG YOLK PERITONITIS

◉ Treatment:

- Drain fluid from coelom
- Fluid therapy – 20 ml/kg
- Amoxicillin/clavulanate – 125 mg/kg PO q12
- Meloxicam 1 mg/kg PO q12-24
- Deslorelin 4.7 mg implant – IM into breast muscle, lasts 6-12 months

FEATHER PLUCKING/LOSS

- ◉ **Boredom/Dietary:**
 - Increase enrichment
 - Check diet – too much seed, not enough veggies
 - Check environment

- ◉ **Hormonal:**
 - Check handling of birds by owners
 - Seasonal
 - Deslorelin implant

- ◉ **Infection/Parasites:**
 - Mites
 - Psittacine Beak and Feather Disease
 - Pain!!

HORMONE-RELATED FEATHER PLUCKING

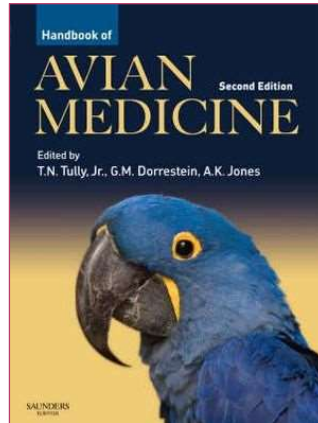
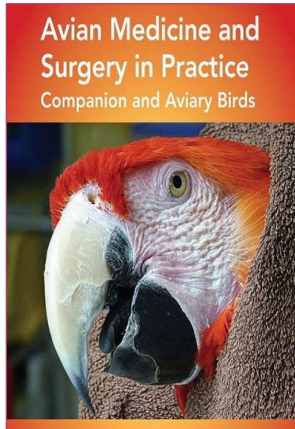
What message are you sending your parrot?

Wild parrots allow head and neck grooming between flock members.
But most of the rest of the body sends a different message!
Only the chosen mate is allowed to groom the rest of the body.

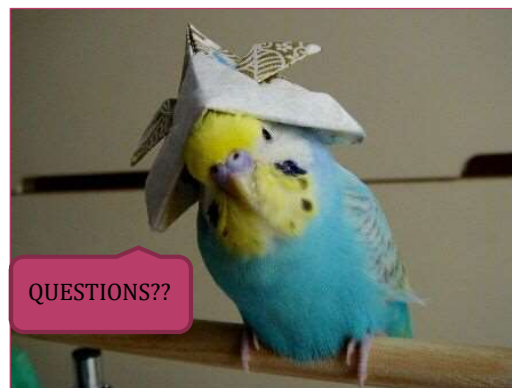


FURTHER RESOURCES

http://avianmedicine.net/wp/publication_cat/clinical-avian-medicine/



THANK YOU FOR YOUR ATTENTION!



If you have any further questions, please contact
vetnetfoundation@gmail.com