INTRODUCTION TO AVIAN PRACTICE: THE BASICS

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Introduction

Birds are commonly presented for emergency care and can be added to the small animal practice with a minimal investment. Contrary to popular belief, birds seen in emergency service consultation are no more likely to die than any other species presented. This presentation is designed as an introductory level primer for veterinarians wishing to add these species to their practice, provide an acceptable level of care on an emergency basis and to avoid common malpractice mistakes and other pitfalls for these special species. Basic emergency care of birds and tips and tricks helpful for these species will be reviewed. Avoidance of dead bird syndrome, fluid therapy, pain control, sedation, anesthesia, euthanasia and nutritional protocols will be summarized as they are presented to incoming small animal interns at Texas A&M University Veterinary Medical Teaching Hospital.

Examination

Much of the examination can be accomplished observationally before the animal is touched. The observational exam can move the private practice from zero to hero by avoiding dead bird syndrome. Observational exam assesses the patient for three critical systems (respiratory, neurologic and musculoskeletal) so that we can decide if the patient can tolerate full physical exam, sampling or handling, or if it must be moved immediately to simple critical therapies and supportive care.

Less is truly more and despite many veterinarians’ extensive medical training we must remember that a successful emergency procedure is of no benefit in a dead patient. Many birds are inherently nondomesticated flock or prey species which even handling can further compromise the patient with instinctive stoicism in order to appear normal until complete health decompensation. Many birds did appear normal yesterday…..but they are not normal today and many owners have feeling of guilt, surprise and denial because this condition happened quickly. Remember that clients are the reason we are in business, so I caution veterinarians to be gracious
and supportive in this time of high stress. Respiratory rate, heart rate and the “pink” of the skin and feet should be recorded, on even the most miniscule patient. For the animal that is in respiratory distress, extreme depression, or obvious neurologic or musculoskeletal abnormalities, consider hospitalization in a warm (80-90) quiet oxygen cage for 30 minutes prior to treatment or examination. Further history can be gathered from the client during this time as this initial stabilization is accomplished.

**Beware the Beak, Wing & Nail trim**

Beak and nail trims should not be turfed to technicians before an observational physical examination is done. Many birds presented for an apparently routine beak wing or nail trim are hiding illness. To avoid the expense issue, we always include a beak wing/ nail trim, if desired, in our physical examination charge for birds.

**Body condition score**

In birds, avian body condition score is a most useful indication of prognosis. Simple avian body condition score is assessed by palpation of the pectoral musculature on either side of the keel (1 concave, Poor prognosis; 2 flat, 3 convex, elliptical, 4 semicircular, 5 beyond keel(M shape, cleavage; obese).

![FIGURE 1. AVIAN BODY CONDITION SCORES](image)

**Fluid administration**

Fluid choice in exotic animal species is based on personal preference and availability; Intraceolomic or IP routes should be avoided in birds; Intraosseous is often used in birds but the pneumatized bones (humerus and ulna) should be avoided in adult birds. Subcutaneous route is often useful for administration in birds and well absorbed based on the large body surface area to weight ratio in these miniscule patients.

**Table 1. Estimation of fluid administration for birds**

<table>
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<tr>
<th>Method</th>
<th>Volume (mls/kg)</th>
<th>Notes</th>
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<tr>
<td>Gavage</td>
<td>25-50</td>
<td>(crop 5% BW) convenient in birds being handfed</td>
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<tr>
<td>IV/IO Bolus</td>
<td>10-15 IV</td>
<td>requires sedation anesthesia, ulnar vein access;</td>
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Nutrition
Nutrition should be provided with care to avoid refeeding syndrome in the debilitated patient. Options include products by Oxbow (herbivore and Carnivore Critical care) and Lafeber (Omnivore, Carnivore and Piscivore) which may be fed by tube. Monitor electrolytes and glucose when refeeding syndrome is suspected and give only 30% of required calories in small feeding initially to avoid this syndrome. Allow birds to eat on their own if possible. We do not tube feed animals which cannot lift their heads as they are prone to aspiration.

Therapeutics
Based on idiopathic hemorrhagic death in birds, Adequan should not be used. Many exotic patients could also be considered food animals (Chickens, Ducks, Geese) and therefore fluoroquinolones should be avoided as they have been withdrawn from the food animal market. For these species we advise use of a signed statement that the animal or its products will not be used for food for its lifetime. The Exotic Animal Formulary is a requirement of emergency medicine practice for exotic animals and a useful reference for not only common dosages but hematology and biochemical reference ranges as well. Each clinic should have a policy on which exotic animals which will be seen based on personnel safety and knowledge. While fluoroquinolones are commonly used in avian medicine they are not a cure-all. They are usually not sufficient or appropriate spectrum for predator attacks and antimicrobial resistance is becoming more common place in our referral practice. Choose antibiotic in birds, as in every other animal, based on culture and sensitivity results, and avoid giving enrofloxacin IM more than once as it is very damaging to tissues.

Pain Control is easily accomplished in birds with medications already available in most veterinary hospitals. Tramadol, Meloxicam and Carprofen are options for use in all species. Butorphanol is the drug of choice for pain control in avian species. Sedation is also easily accomplished in most birds (up to 2 mg/kg IN). Isoflurane and Sevoflurane remain staples for anesthesia induction and maintenance.

Longevity & Euthanasia
Many mammal and avian small exotic patients have a short expiration date and client may be unfamiliar with expected longevity: Provide owner comfort regarding normal lifespan range. Finch – 5 years; Lovebird 10 years, Canary, Parakeet 15 years, Cockatiel 20. Bird owners often think than any bird will live to be 80 years old, this is the exception rather than the rule; a 30 years old parrot is aged. Euthanasia methods are extremely valuable for emergency veterinary
practice of small exotic animal species. Cardiac, IP and Intrahepatic injection are all acceptable methods in the anesthetized patient. Gas anesthesia followed by IV, Occipital sinus or cardiac injection are routine methods in avian species.

References