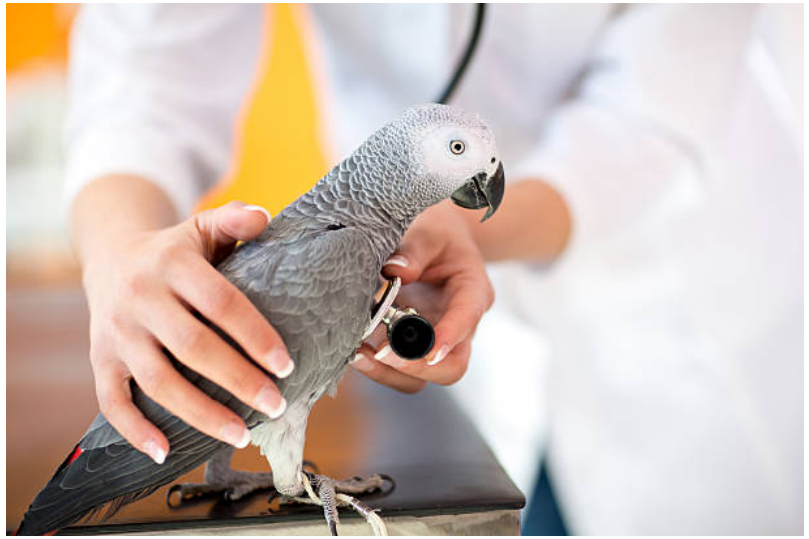
Avian Veterinary Care
Best Practices for Clinical Consultation



Basic requirements for Avian Consultation

- **Key Steps for Reception Staff**
- Identifying Emergency vs Non-Emergency conditions, Notifying accordingly to the veterinarian.
- Move emergency cases to a quiet examination area promptly.
- Calm the Client:

  Many bird owners panic due to the fragile nature of their pets. Reassure them while taking swift action.

Requirements of Avian Exam Room

1. Room Design and Layout

- **Quiet and Isolated Location**:
  - The room should be away from loud noises, barking dogs, or other predator species that can stress birds.

- **Temperature and Humidity Control**:
  - Birds are sensitive to temperature changes. Maintain a temperature of 25–30°C (77–86°F) with controlled humidity (40–60%).

- **Ventilation**
- Proper air circulation should be present but avoid direct AC ducts.

- **Adequate Lighthing**
- Use bright , natural light(or full spectrum lights) for proper examination
- Avoid harsh fluorescent lights, which can flicker and stress bars

2. Safety Features

- **Non-Toxic Materials**:
  - Use bird-safe, non-toxic cleaning products and materials for the flooring, walls, and furniture.

- **Secure Windows and Doors**:
  - Windows should have screens, and doors should have automatic closures to prevent escapes.

- **Anti-Slip Flooring**:
  - Install easy-to-clean, non-slip flooring to prevent accidents and simplify disinfection.

3. Examination Equipment

- **Avian Scales**:
  - Precision scales for weighing birds

  (essential for monitoring health and dosage calculations).

- **Perches and Towels**:
  - Different-sized perches for birds to sit on during examinations.
  - Soft, clean towels for handling and restraint without causing injury.



- **Magnification Tools**:

  Magnifying loupes or headlamps for close examinations of feathers, beaks, and eyes.

- **Diagnostic Tools**:
  - Stethoscope with a pediatric or neonatal chest piece.
  - Otoscope with small, bird-specific tips.
  - Ophthalmoscope for detailed eye examinations.
  - Digital thermometer for cloacal temperature readings.
  - Portable X-ray or ultrasound machine (if available).





Examination of Avian Patient

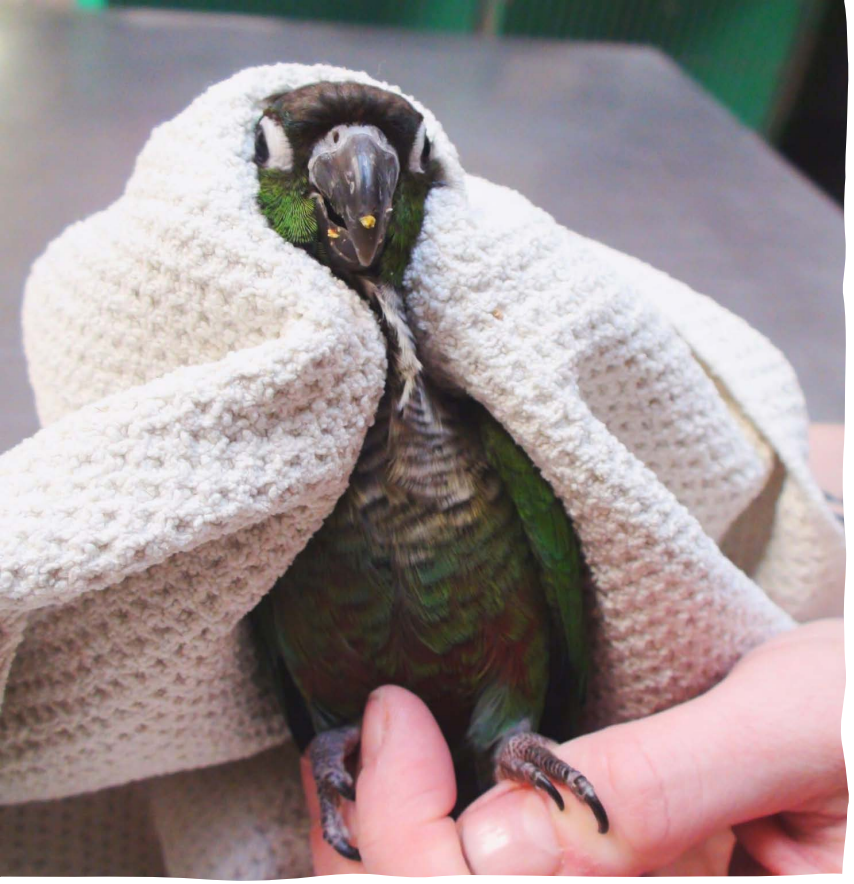
1.**History-Taking:**

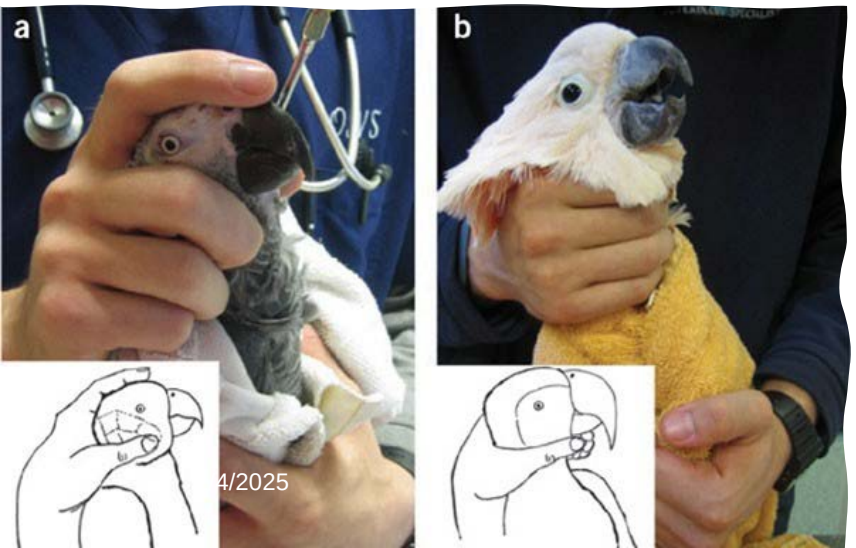
Before handling the bird, gather detailed information from the owner:

- Species, age, and sex (if known).
- Diet and feeding habits.
- Cage conditions, environmental factors (e.g., lighting, ventilation).
- Behavioral changes (e.g., lethargy, vocalization).
- Recent illnesses, injuries, or exposure to toxins

- **2. Observation (Before Handling)**
- Begin by observing the bird from a distance in its carrier or cage:
- **Posture**: Look for abnormal stances (e.g., head tilt, hunched body).
- **Respiration**: Note open-mouth breathing, tail bobbing, or wheezing.
- **Activity Level**: Is the bird alert and moving normally?
- **Feather Condition**: Inspect for feather plucking, damage, or dullness.
- **Droppings**: Check feces in the cage for changes in color, consistency, or frequency.





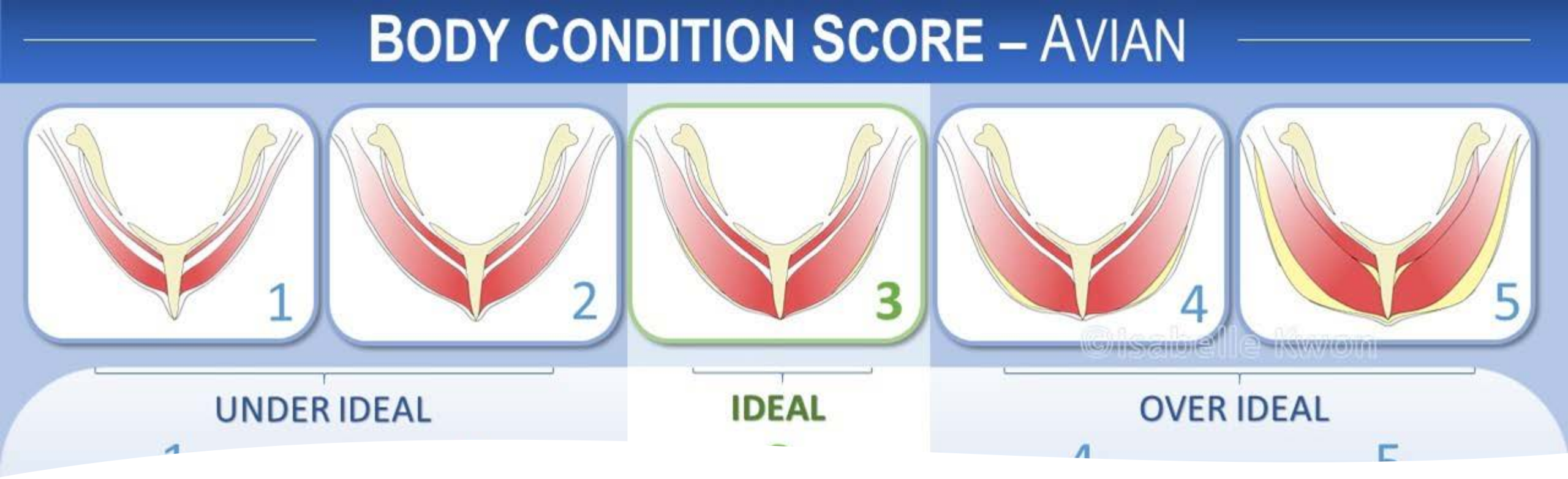


- **3. Handling the Bird**
- **Restraint:**
- Use a soft towel to gently restrain the bird, ensuring wings are secured without excessive pressure.
- Avoid compressing the chest, as birds need freedom to expand their sternum for breathing.
- Safety Tips:
- Minimize the duration of handling to reduce stress.
- Monitor the bird’s response, pausing if signs of distress (e.g., panting or weakness) appear.

Physical examination

1)Head and Beak:

- **Beak**: Check alignment, overgrowth, cracks, or discoloration.
- **Nostrils (Nares)**: Look for discharge, blockages, or swelling.
- **Eyes**: Observe for brightness, clarity, discharge, or swelling.
  - Use an ophthalmoscope for a detailed examination of the cornea, lens, and retina.
- **Ears**: Inspect for swelling, redness, or debris using an otoscope.



3)Body Condition:

- Palpate the **keel bone** to assess body condition (e.g., emaciation or obesity).
- Evaluate muscle mass around the pectoral region.

- 2)Feathers and Skin:
- Inspect feather quality, pattern, and growth.
- Look for ectoparasites (e.g., mites, lice) or lesions.
- Part feathers to examine the skin for wounds, bruising, or discolorat



5)Wings:

- Extend each wing gently to check for fractures, swelling, or range of motion.
- Look for missing or damaged flight feathers.

6)Abdomen:

- Palpate the abdomen for swelling, masses, or fluid accumulation.

7)Cloaca:

- Inspect the cloacal region for swelling, discharge, or prolapse.
- Check for staining, which may indicate diarrhea or reproductive issues.

8)Legs and Feet:

- Inspect scales for dryness, swelling, or trauma.
- Examine nails for overgrowth or fractures.
- Check footpads for sores, ulcers, or signs of pododermatitis (bumblefoot).

- 10)Cardiovascular System:
- Auscultate the heart for murmurs or arrhythmias.
- Evaluate capillary refill time by blanching the skin near the beak (if feasible).
- 9)Respiratory System:
- Listen to the chest with a **stethoscope** for abnormal sounds like wheezing or clicking.
- Check for tail bobbing, which indicates labored breathing.

Diagnostic Tools

Oropharyngeal Exam: Open the beak to inspect the oral cavity and throat.

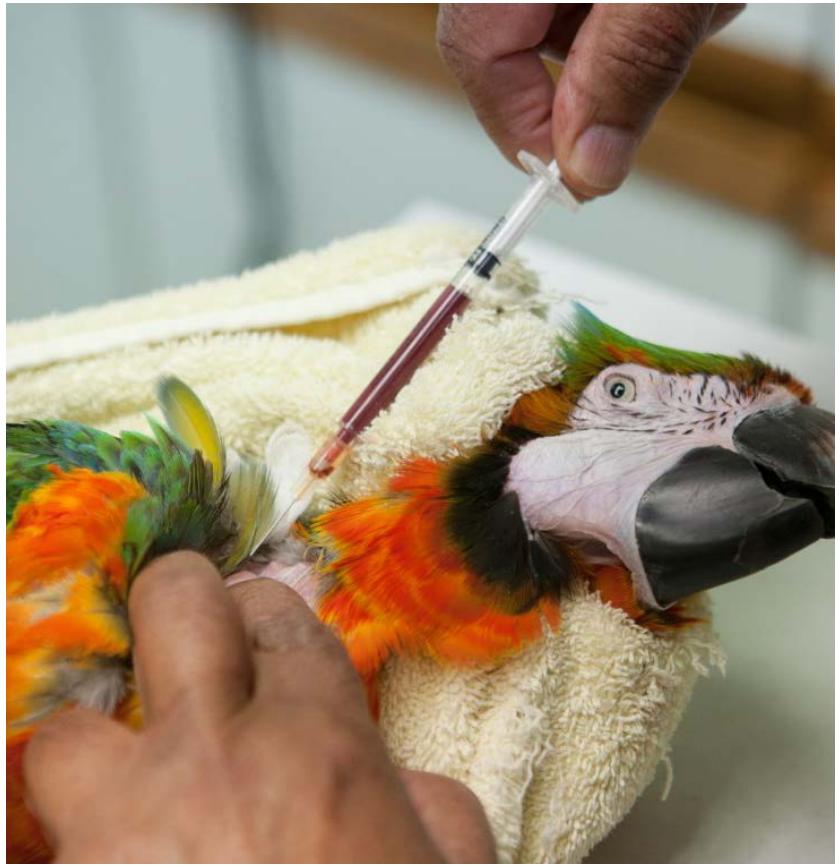
Take oral and choanal swab smear and examine under microscope.

Cloacal swab: Cloacal swab smears can be taken and examined under microscope

Blood Collection: Collect a small sample for hematological or biochemical analysis.

PCR, Snap tests can be done.

Imaging: Use X-rays, USG , CT Scan.



How to medicate the bird?

- **On the basis of Suspected or Diagnosed Infection**
- Identify the causative agent through diagnostic tests (e.g., Gram stain, culture, sensitivity testing).
- Selection of the Antibiotics can be done depending on diagnosis.

- **Route of Administration**
- Birds may be medicated via:
  - **Oral**: Through drinking water, food, or gavage.
  - **Injectable**: Intramuscular or subcutaneous for systemic infections.
  - **Topical**: For localized skin or eye infection

Fluid therapy

Routes of Administration

Oral (PO)
- For mild dehydration and birds that are eating and drinking.
- Use an oral syringe or crop tube.
- Avoid if the bird is regurgitating or in shock.

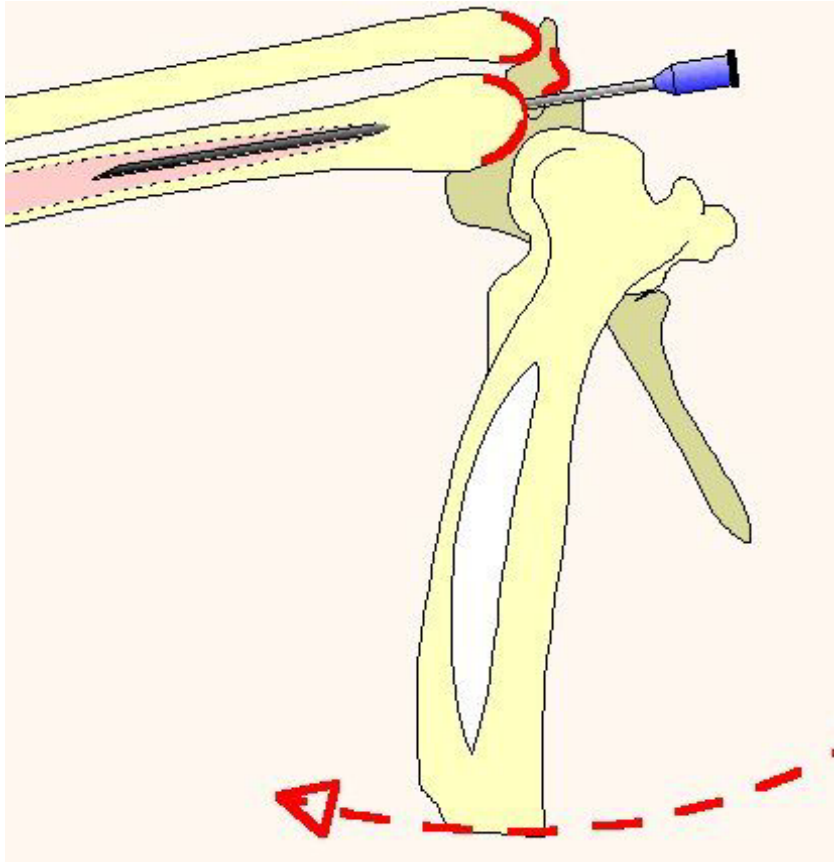


Subcutaneous (SC)
- Suitable for mild to moderate dehydration.
- Administer in the **inguinal fold** or between the shoulder blades

- **Intravenous (IV)**
- Preferred for severe dehydration or shock.

- Sites:
  - Basilic vein (wing vein).
  - Medial metatarsal vein.
  - Jugular vein (small birds).

- **Intraosseous (IO)**
- Done under sedation
- For birds too small or too compromised for IV access.
- Sites:
  - Distal ulna.
  - Proximal tibiotarsus.
- Use specialized needles (e.g., spinal needles).
- Provides rapid and effective resuscitation.



Warming Fluids

- Warm fluids to **body temperature** before administration to prevent hypothermia.

- **4. Fluid Volume and Rate**
- **Maintenance Fluid Requirements**
- **40–60 mL/kg/day** (species-dependent).
  - Adjust for environmental factors (e.g., temperature, humidity).
  - **Replacement Fluids**

- Combine **maintenance** and **deficit replacement**:
  - Replace **50% of the fluid deficit** within the first 24 hours.
  - Administer slowly to avoid fluid overload.

Critical care for Birds

Basic requirements for providing critical care to avian patients

Oxygen supply

Nebulization Machine



- **Intensive care unit(ICU)/Bird brooders**
- Helps to maintain adequate temperature and humidity



- **Multiparameter monitoring equipment**
- For continuous monitoring of heart rate, respiration rate, Oxygen levels etc



Thank you!