## Avian Physical Exam

Kristina Palmer-Floltry RVT

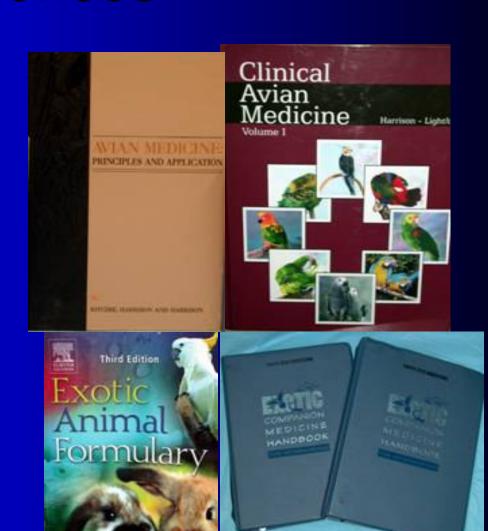
Companion Avian/Exotic Pet Medicine & Surgery

Veterinary Medical Teaching Hospital

University of California @ Davis

#### References

- Books & references
- Normal reference ranges.
- Keep good records on your patients.
- Patients previous routine blood work serves as base line.
- Continuing education
  - > A MUST!



#### Compassion and Knowledge

- Patient experience
  - ► Non-threatening and safe
- ➤ Pets are FAMILY MEMBERS
  - Treat them like the pet is their child
- Client experience
  - Pleasant and informative



#### Client Education

- Know proper care of the *species* and be able to facilitate the client's and patient's needs
  - >HUSBANDRY = animal care in captivity
  - >Appropriate diet
  - Appropriate cage & home environment
  - > Handouts
- Improper husbandry & diet are the #1 reason for visit to veterinary clinic









#### Well Bird Exam

- Start with a thorough patient history.
- Physical exam should be done annually.
  - Allow at least ½ ¾ hour for 1st visits & sick birds.
- Become familiar with the normal bird.
- Hands on PE should only be approximately 5 minutes
- Develop a systematic approach to the PE.
- Have instrumentation ready.
- Quality restraint is required.
- Anesthesia is rarely required.

#### Get a Detailed History

This is more like detective work.

#### What is the husbandry like?

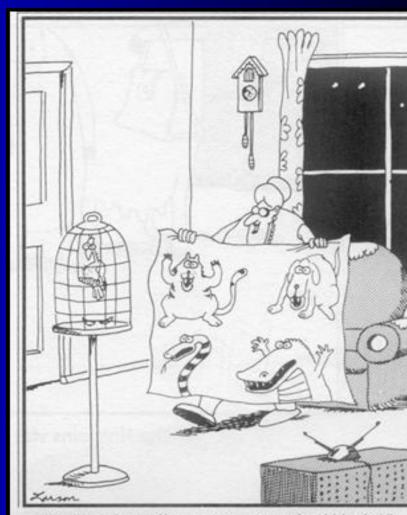
Improper husbandry is a common cause of illness.

#### Inquire about everything.

- New pets in the house?
- Diet & droppings.
- Cage type and location.
- Perches, substrate and toys.

Create a history form for clients to fill out.

ensuring important questions not be forgotten.



"Bedtime, Leroy. Here comes your animal blanket."

#### **AVIAN HISTORY FORM**

<u>al History</u>	
Name	_ Sex: M F UNK
vas bird sexed? Blood TestSur	gical?
pecific Identification? (ie: tatoo, band, microchip)	l
is female, has she produced eggs in the past? (if y	yes, please describe)
a: Pet Breeder	
id you acquire the bird? Store Breeder	Other (describe)
equired?	
have any other pets? Y N	
please specify including ages and when acquired	1
ng.	
ng bird kept: Indoors Outdoors Both uch)	
s your bird housed? Cage Aviary	Free in the house
oird housed alone? Y N If no, describe	;
is caged, what type of cage?	
lo use on the bottom of the cage?	
ften is the cage cleaned?	
d/ frequency of cleaning food/ water dishes	
ys in the cage? Y N If yes, describe	
e bird's environment changed recently? Y N_	If yes, describe
nt, do you cover the bird? Y N	_
nany hours of darkness does the bird have each da	ıy?

foods are offered to your bird/ in what total percentages? (ie: 50% seed,	
percentages of these foods do you remove from the cage at ght?	
applements offered? Brand name?	
eats offered? Type? How often?	
cent diet changes or new foods? Y N If yes, describe	
s water offered? (ie: sipper bottle, bowl)	
n For Today's Visit:	
signs have you noticed that prompted today's sit?	
ong have you noticed the problem?	
our bird been sick previously?	
e bird ever been seen by any other veterinarian? Y N If yes, when/ hy?	
my tests been performed previously on your bird? Please circle all that apply:	
osis; CBC; Psittacine Beak and Feather Disease; Polyoma Disease; Parasites; Other bloodwork; Other (pleaescribe)	se
onal comments (your comments regarding the reason for this visit):	

## Reproductive Activity

# Is the sex of the patient known?

- How was it determined.

#### Any reproductive behavior?

- Hiding in dark places.
- Paper shredding.
- Regurgitating for owner & mirrors.
- Spending more time at bottom of cage.
- Masturbation.



## Cage Toys

Birds require stimulation.

No quality control for avian toys.

Organic toys.

- Origami with food.
- Manufactured organic toys.

No small toys for large birds.

Chewed rope can be hazard.

Beware of toxic toys.



#### What's For Dinner?















## Normal Droppings

- Fecal component
  - Green to light brown
  - May vary in consistency
- Urine
  - Should be clear
  - Stress can create polyuria
- Urates
  - White to pale tan



## Weigh The Patient

Weigh in grams at each visit.

Well bird exams & grooming.

Container for flighted birds.

Compare weight with body mass.

Normal weight range but emaciated?

Indication of a problem.



#### Initial Assessment

- Visual physical.
- Evaluate the bird in its cage.
  - Respiratory rate and effort.
  - Mentation & stance.
  - Droppings.
  - Diet.
  - Cage and toys.
  - Substrate & perches.





## Trouble Perching or Fluffed

- May indicate that the bird is very sick.
- Advanced stage of disease.
- Birds are experts at hiding illness.
- Inform client of the fragile state and potential for death.



## Supportive Care

- Thermal support.
- Oxygen therapy.
- Quiet, dark environment.
- SQ fluids.
- Diagnostics.
  - Prioritize.
  - Do in stages.
- Nutritional support when the patient can tolerate it.
- Calculate emergency drugs.







"Polly wanna finger."

## Capture and Restraint

Know the patient's limitations Establish priorities

Physical exam & diagnostics
 Monitor stress level during
 restraint



#### Normal Avian Respiratory Tract

#### Jpper respiratory tract—

- Nasal passages/choana
- Sinuses
- Cervicocephalic air sac (2)
- Lower respiratory tract
- Lung
- Air sacs
- Large respiratory capacity
- Need keel movement for air exchange



#### Capture and Restraint

Gloves are not ideal for capture & restraint.

Have nets available.

Don't grab off the shoulder.



#### Capture and Restraint

Close the window blinds.

Close and lock doors.

Remove cage accessories.

Perches & dishes.

Use towels for capture.

- For your protection.
- Disguises hands.
- Fear of hands.

Turn off or dim the lights.









# Falling Ceiling



# Capturing a Macaw







#### Hands-on Physical Exam

- Be systematic and develop a routine.
- Have instrumentation ready.
- Requires a skilled restrainer.
- Monitor closely for stress.
  - Responsibility of the restrainer.
- Careful not to place pressure on keel.



# Examining The Very Tame Bird

- Most of exam can be performed during a petting session.
- Oral and cloacal exam will require full restraint.





# Eye Exam

Bilaterally symmetric.

Free of discharge.

Corneal evaluation.

Can stain with fluorescein stain.

#### PLR check.

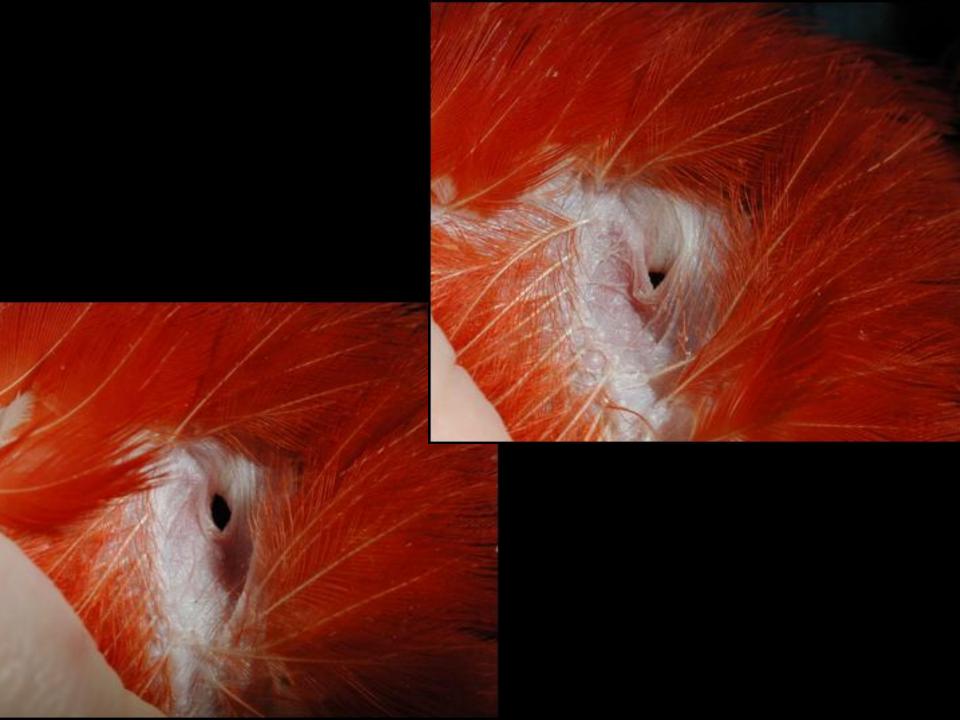
- Focal light source.
- Voluntary control.

Severely dehydrated--sunken









### Nares

Symmetrical.
Free of discharge.
Evenly colored.
Different appearances.

- Round openings.
- Slits.

Operculum normal keratinized plate.

- Debris can plug the nare.
- Don't mistake debris for operculum.



### The Beak

#### Proper length.

Different sizes for different birds.

Firm.

Not excessively flaky.

Should not require trimming.

Excessive growth.

- Improper wear.

Malnutrition or systemic disease.

- Liver disease.



### Oral Exam

Extremely important part of exam

- Window to the GI and respiratory systems
- May need speculum
- Requires skilled restrainer.
- Requires good light.
- Great place to assess hydration.





# **Oral Cavity**

Smooth & evenly colored. Glistening.

#### **Choanal Slit**

- V shaped cleft in the palate.
- Sensory papillae
- Sharp





# **Assess Hydration**

#### **History of:**

Inadequate water intake are suggested to be 5% dehydrated.

Trauma or disease are suggested to be 10% dehydrated.



# Assessing Hydration

#### Areas to assess:

- Oral cavity:
  - Moist not tacky.
- Skin tenting-reflects decreased water content of skin.
  - Skin over feet.
  - Upper eyelid.
  - Wing web.
- Ulnar vein refill time.
- Eyes will be sunken in severely dehydrated birds.

# Body Condition



- Indicator of overall health
- Palpate the ratio of pector muscles to sternum.
- Pectoral muscles should be solid, well formed and rounded.
- Body scoring of 1-9.
  - \_ 1= emaciation
  - 9=obesity



### Feather Condition

should be smooth & regular.

Stress marks:

- Structural changes.
- Color alterations.
- Increased translucency.

No frayed edges.

ain.

Disease.

Poor nutrition & husbandry.

Boredom.



### Check the Feet

#### Plantar surface

Epithelial thinning

Pododermatitis

Lameness

Obesity

Perches

- Variety of sizes
- Rough texture



### Cloacal Examination

- Clean uniform feathers around the vent.
- Pasting of feces around vent—
  - Cloacal disfunction
  - Polyuria
  - Enteritis
  - Down at cage bottom
  - Can prevent elimiation



# **Everting The Cloaca**

- Insert dampened or lubed
   CTA into cloaca
- Gently advance
- Slowly pull the cloacal tissue out
- Smooth pink appearance







# **Uropygial Gland**

- Preen gland.
- Located dorsal to the cloaca.
  - Absent in some birds.
- Smooth & evenly colored.
- Yellow creamy material.
- Infections and neopasias.







### Auscultation

Pediatric stethoscope.

Heart rate 45-600 bpm.

Count in groups of 10 for 6 seconds.

Slight rush of air.

Audible cracks & wheezes are abnormal.

Inspiration = upper airway.

Expiration = lower airway.



# Well Bird Exam Base-line Diagnostics

- Base line blood work.
  - CBC & biochemistries.
- Fecal exam.
  - Fecal float and direct.
  - Gram stain.
- Chlamydophila psittaci testing.

- Virus screening.
  - PBFD virus--PCR.
  - Polyoma virus--PCR.
- Whole body radiographs.
  - VD and lateral views.

# Special Thanks!

- **K** AAHA
- **UC** Davis
- Residents
- Staff

