Pet Bird Medicine 2

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Covered in this talk…

1. Common avian diseases to be aware of
2. Feather-Picking Behavior
3. Anesthesia

Common Avian Diseases to be aware of

Avian Chlamydiosis
Psittacine Beak and Feather Disease
Polyoma
Pacheco's Disease
Proventricular Dilatation Disease

Avian Chlamydiosis

(Parrot Fever, Ornithosis, Psittacosis)

*Caused by: Chlamydia psittaci (an obligate, intracellular Gram negative bacteria)

Clinical signs may include: Respiratory signs, lethargy, yellow urates

Gross necropsy: Swollen liver, enlarged spleen, air sac pathology

Treatment: Doxycycline for 45 days (30 days for budgerigars).

Can be IM (Vibravenos from Europe) 75-100mg/kg IM once/week for 45 days

PO at 25-50mg/kg once/day for 45 days

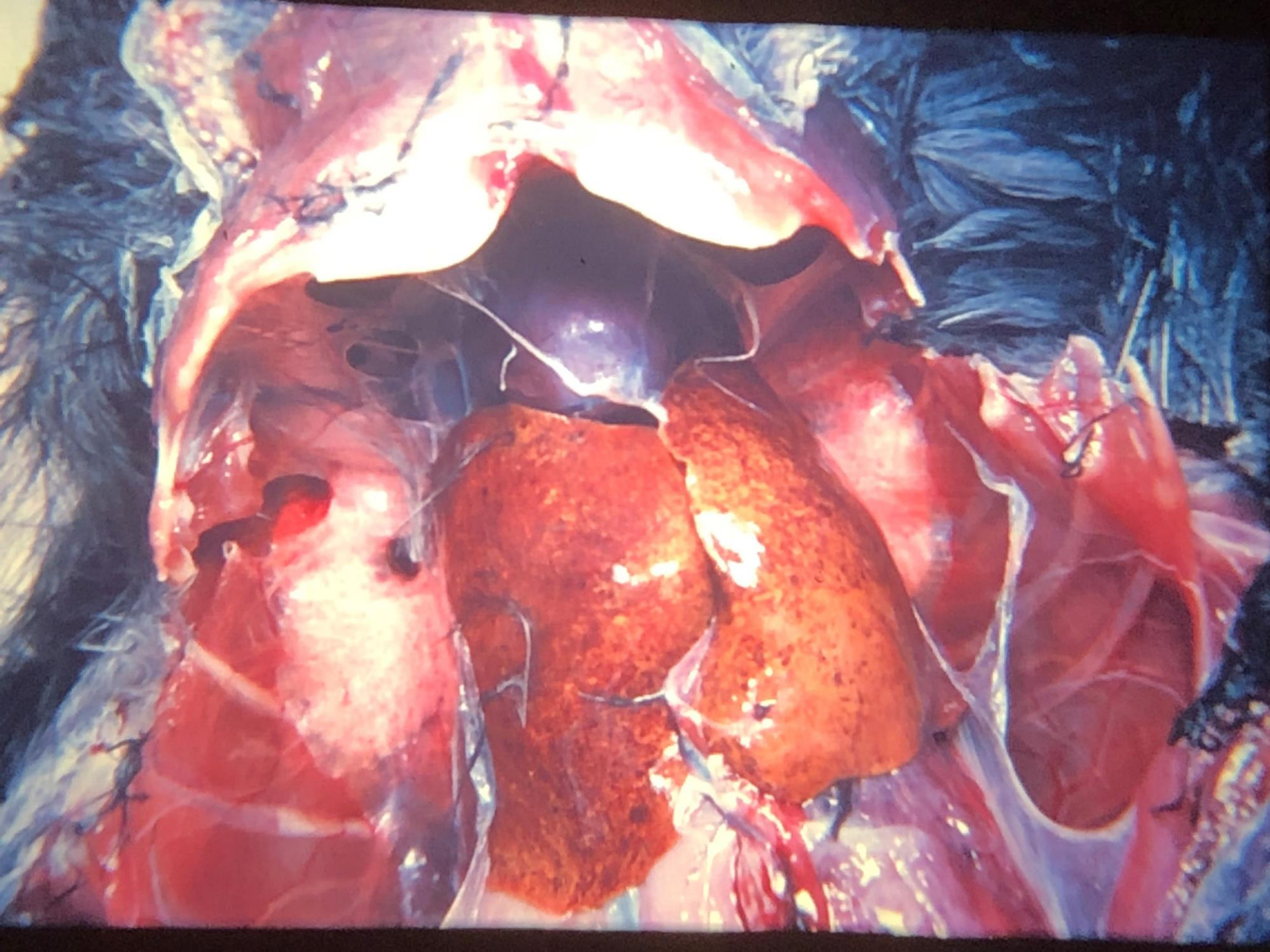
Drinking water at 400mg/liter (cockatiels) * can research doses for other psittacines if needed since they are usually higher

** I see Psittacosis primarily in Amazons, Cockatiels, and Budgerigars

** There is a PCR test for Chlamydia psittaci. Histopathology is best.

** Chlamydia psittaci is zoonotic so a potential danger to owners

Notice how lethargic and sleepy this bird looks. He's unable to perch. The question now is, "What is the cause?"



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Psittacine Beak & Feather Disease

Caused by: Circovirus

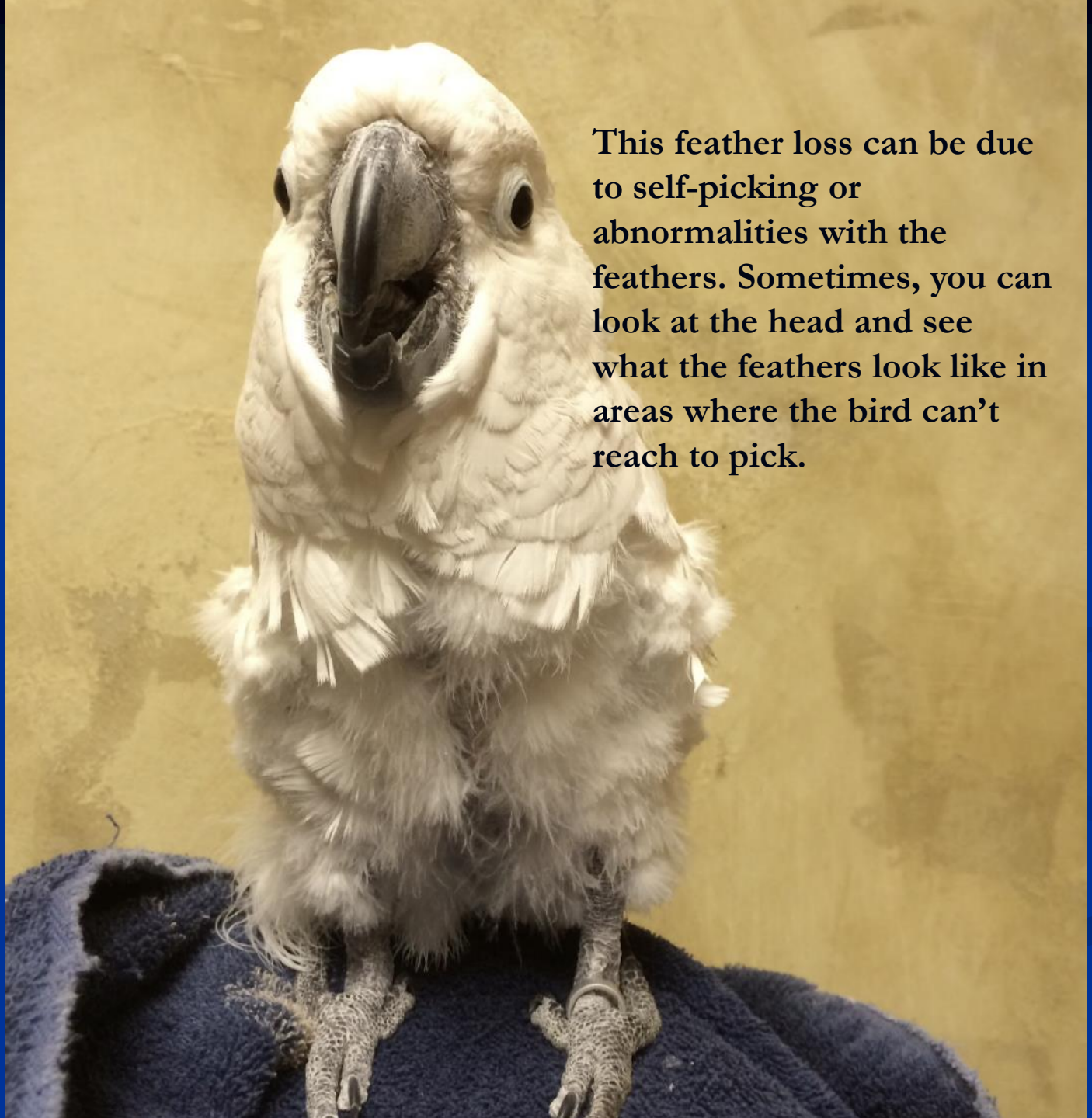
Clinical signs may include: Abnormal feathers, pinched-off feathers, necrosis of the beak, neurological signs

Treatment: There is no curative treatment. Bird should be isolated from other birds or euthanized since passed via bird dander and fecal contamination.

** There is a PCR test using blood or swabbing the feathers

** PBFD must be differentiated from feather-picking. Testing will do this.

** Also, feather-picking usually doesn't affect the feathers of the head and the feathers aren't deformed/pinched off.



This feather loss can be due to self-picking or abnormalities with the feathers. Sometimes, you can look at the head and see what the feathers look like in areas where the bird can't reach to pick.

This can be feather-loss due to another bird picking at the feathers (domination) or disease.

If chronic, the follicles may be damaged, and the feathers never grow back.

Avian Polyomavirus

Caused by: Polyomavirus

Clinical signs may include: Sudden death, usually in psittacines less than 14 weeks of age. Liver abnormalities, ascites, hemorrhagic heart
Feather abnormalities (previously called Budgie Fledgling Disease in budgerigars)

Treatment: This disease is very contagious in younger birds. There is no actual treatment; however, isolating sick babies and stopping breeding for 6 months will usually allow the disease to "run its course" in the aviary.

** Adult birds are usually asymptomatic but can pass the disease to babies

** Cockatoos, African Greys, and Amazon Parrots seem to be more resistant. Eclectus seem to be very sensitive.

** In my experience, the greatest risk to a breeder collection is for an infected adult bird to be introduced into the household and then it passes the virus to the babies.

** There is a vaccine available.

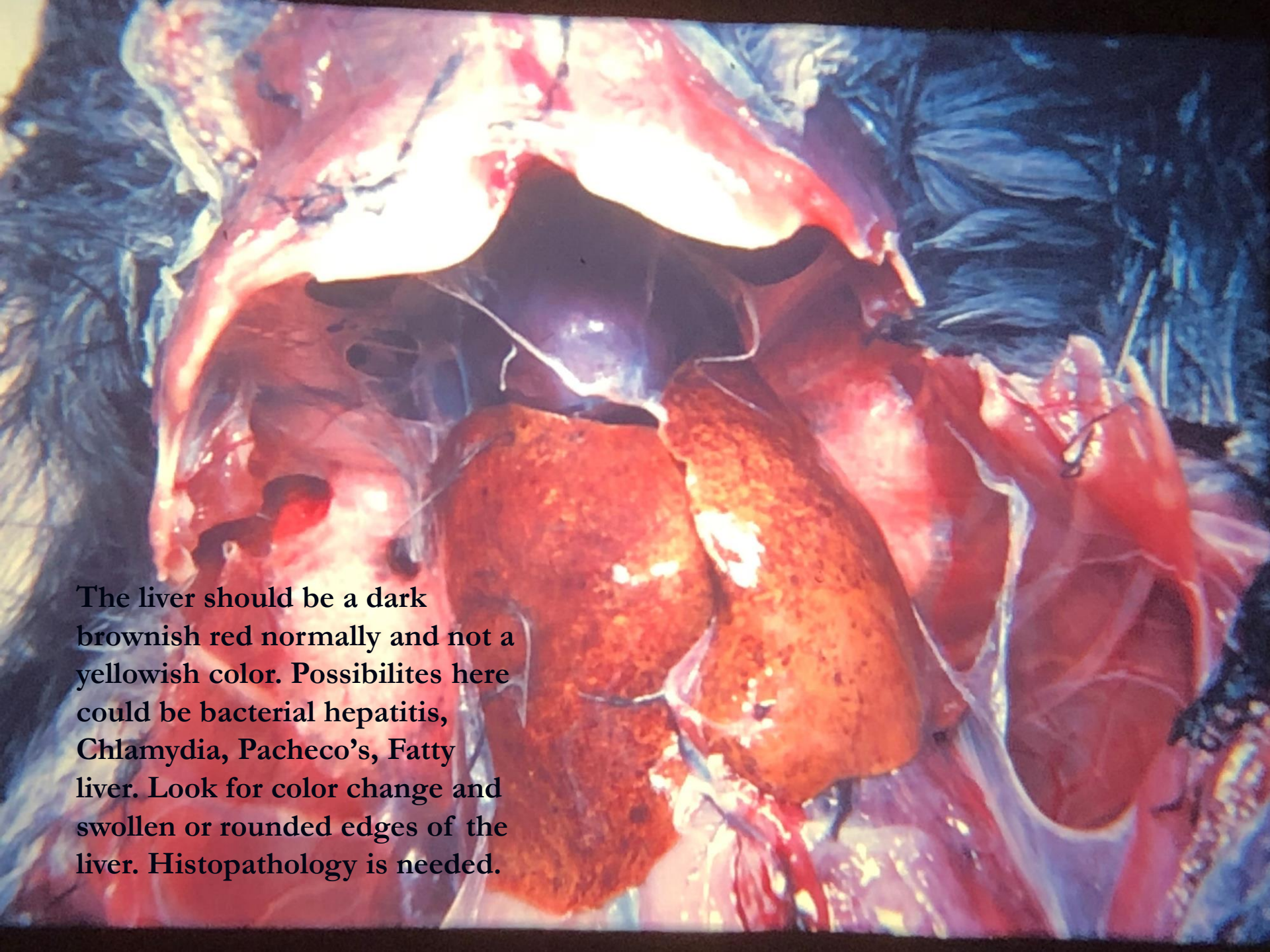

Male Eclectus parrots are green, and Females are red.
Eclectus parrots seem to be more sensitive to Polyoma virus than other birds. Cockatoos and African Grey Parrots seem to be less sensitive.


Hemorrhage of the
heart is a common
finding with Polyoma.

Pacheco's Disease

Caused by: Herpesvirus
Clinical signs may include: Acute death, lethargy prior to death (often just fall off the perch and are dead)
Gross necropsy: Usually well muscled and look normal (since is so acute), Swollen, mottled liver
Treatment: Acyclovir 80mg/kg PO q 8 hrs for 14 days

** Patagonian conures have been known to be asymptomatic carriers of Pacheco's
** Treatment is difficult since it is so acute it is hard to tell if the bird might have the disease.
** There is concern that Acyclovir may create viral carriers of the disease.
** Avian herpesvirus has also been found to be the cause of avian papilomatosis (growths on the vent and/or choana) and of bile duct carcinomas.


The liver should be a dark brownish red normally and not a yellowish color. Possibilites here could be bacterial hepatitis, Chlamydia, Pacheco's, Fatty liver. Look for color change and swollen or rounded edges of the liver. Histopathology is needed.

Proventricular Dilatation Disease

(PDD, Avian Ganglioneuritis, Macaw Wasting Disease)

*Caused by: Currently, it is being associated with Bornavirus

Clinical signs may include: Weight loss, regurgitation, passing seed in stool, neurologic signs

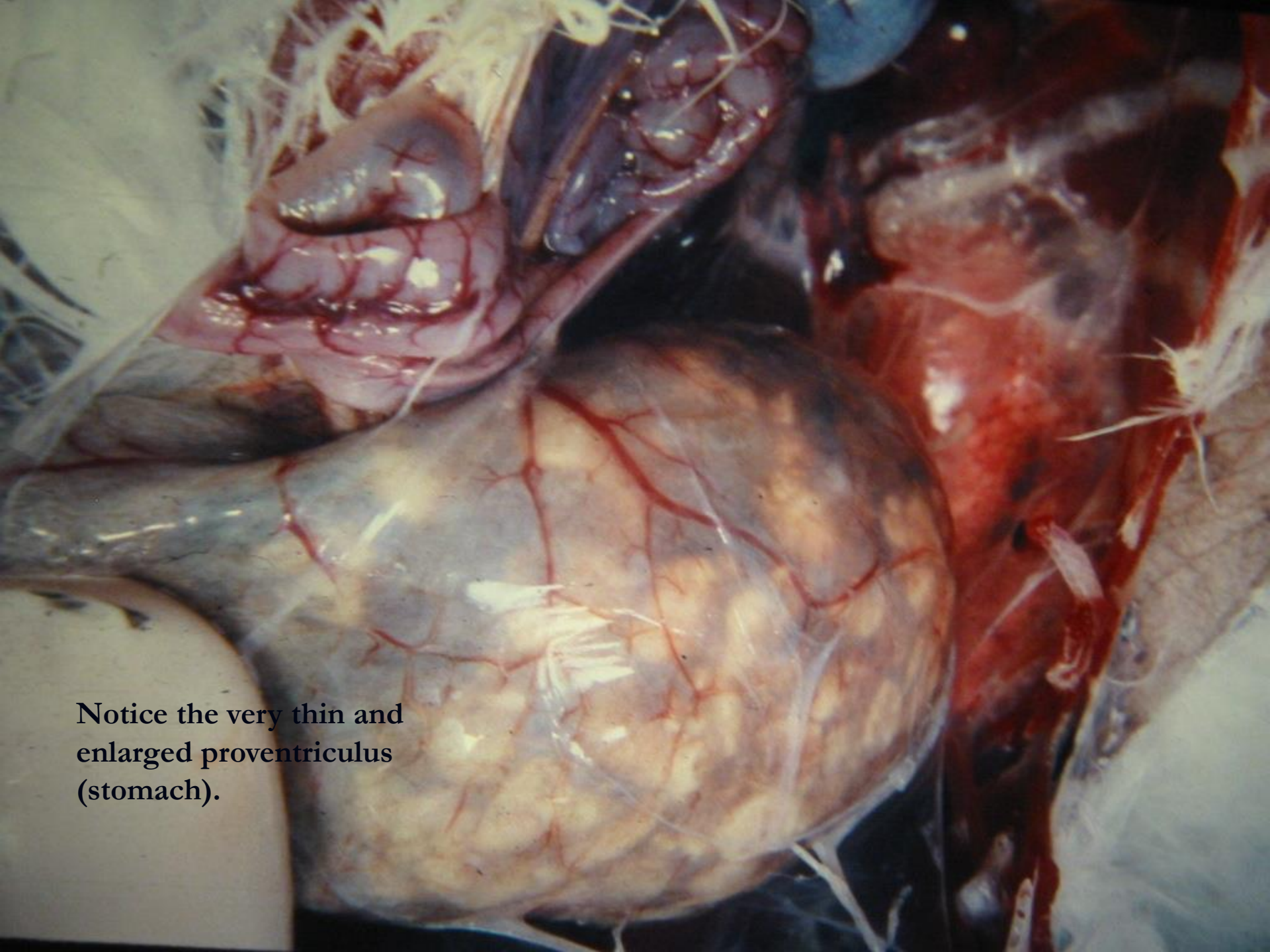
Gross necropsy: Enlarged, thin proventriculus (stomach)

Treatment: There is no cure for the disease; however, anti-inflammatory medications have been used to provide comfort for the bird. Medications used have been Celecoxib and Meloxicam; however, not with much success.

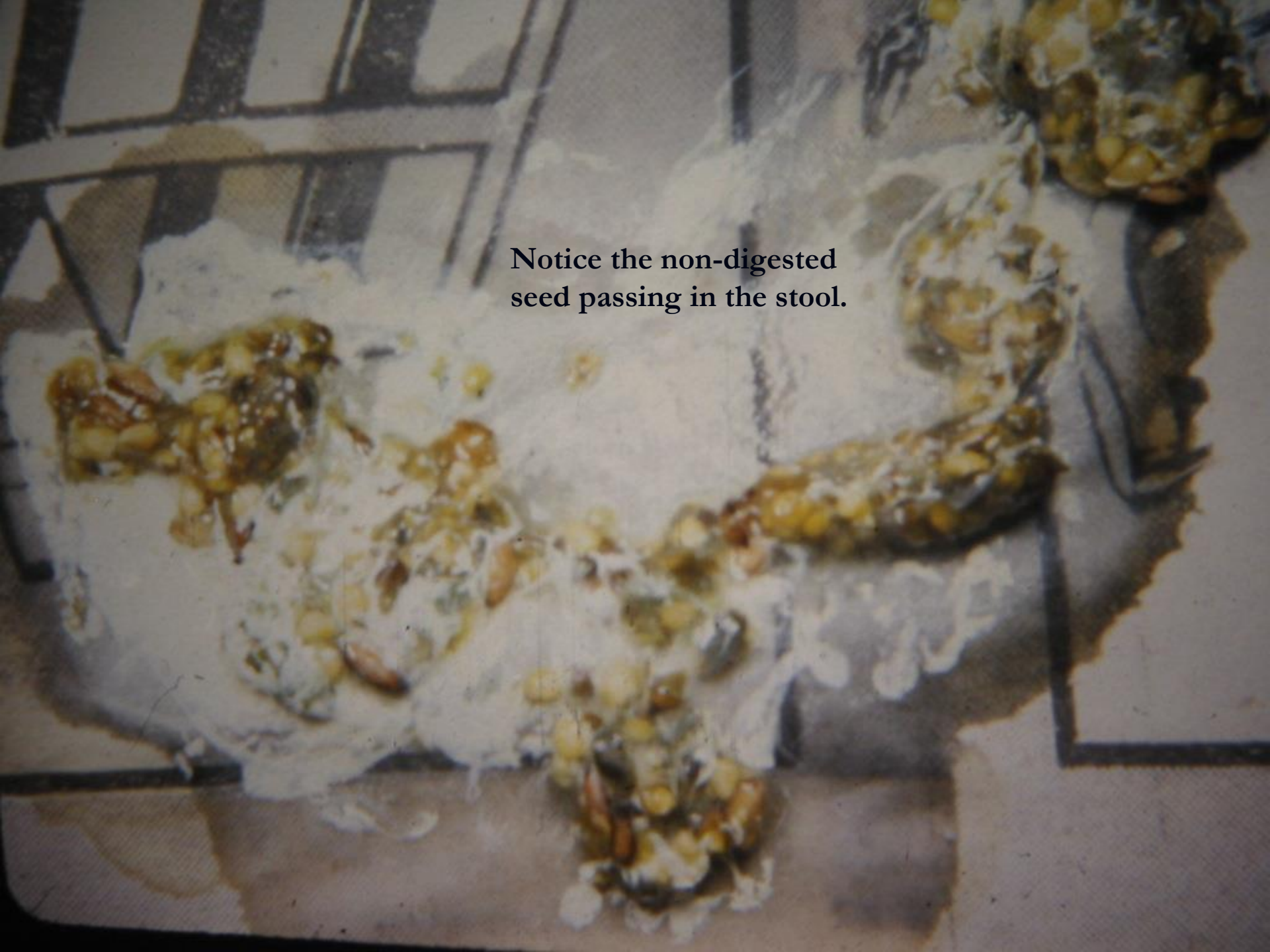
** Lots of research are being done on this disease but there are more questions than answers at this point.

** Birds showing signs should be isolated from other birds in the collection.

** There is a Bornavirus PCR test; however, it is controversial and should not be used to decide whether to euthanize birds in my opinion.



Notice the very thin and enlarged proventriculus (stomach).


Notice the non-digested
seed passing in the stool.

Avian Anesthesia

* Inhalation anesthesia (Isoflurane/Oxygen)

*Preferred anesthetic if available

*Birds can be masked down.

*Tracheal tube can be used (non-cuffed) or not

(With smaller birds, the tracheal tube can become blocked with mucus so be careful.)

*Watch bird very carefully keeping the bird as "light" as possible.

(If there is a danger time, it is as you take the bird off the anesthesia so turn gas down as you start ending procedure.)

*If the bird quits breathing when removed from anesthesia, have a tracheal tube in place and breathe into the tube filling the air sacs to increase the CO2 which helps stimulate the bird to breathe

* Injectable anesthesia (Ketamine)

Ketamine HCl injectable anesthesia

20-100gm Body Weight….0.1-0.2mg/gram
200-500gm Body Weight….0.05-0.1mg/gram
500-3000gm Body Weight….0.02-0.1mg/gram

(example: 350gm parrot would be 350 x 0.05mg = 17.5mg
(100mg/ml in a bottle of Ketamine) so 0.17ml
so the low dose would be 0.17ml and high dose 0.34ml IM

(I always added 0.5ml Acepromazine (10mg/ml) to a 20ml bottle of Ketamine (100mg/ml) which seemed to make the anesthesia "smoother".

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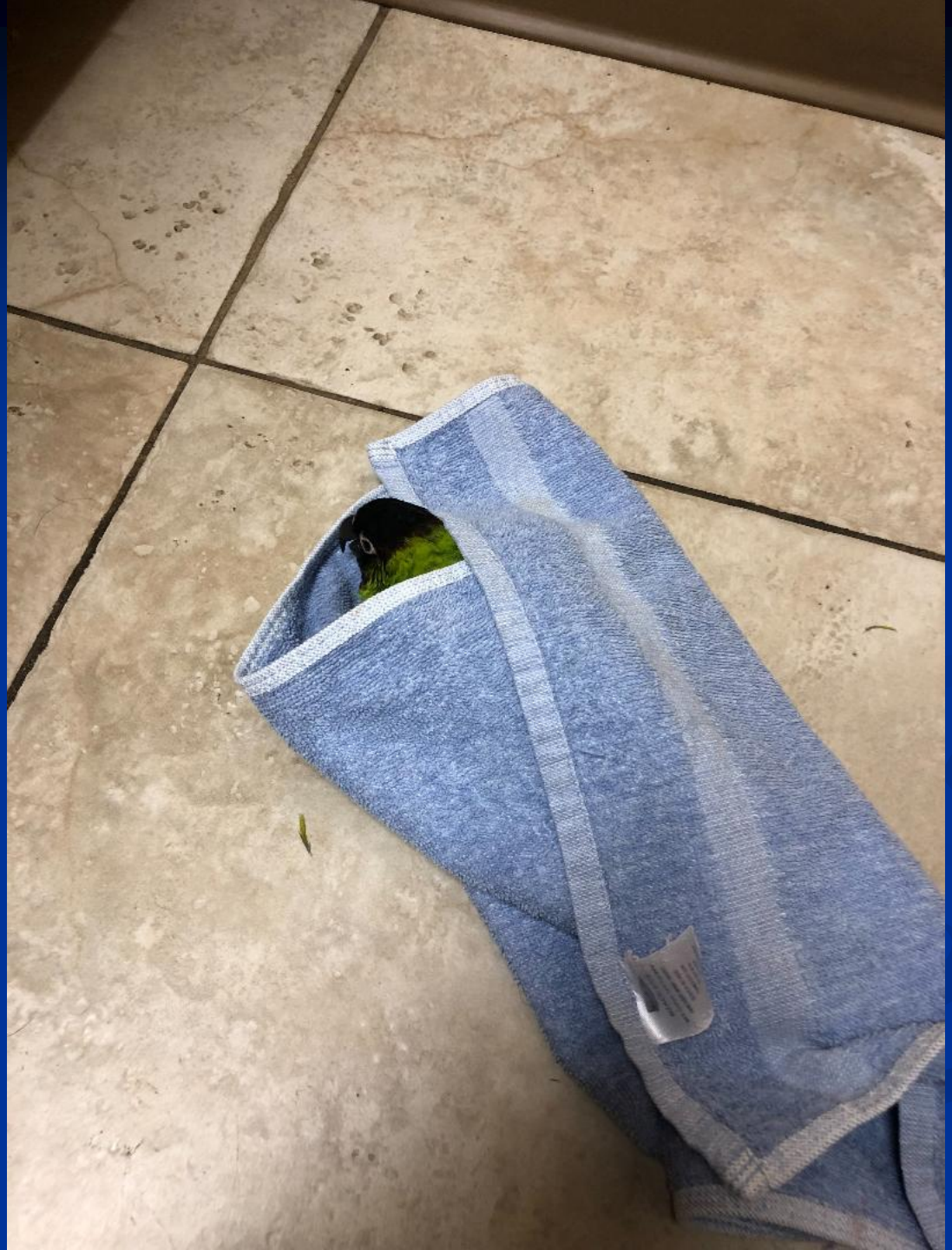
*These doses are based on 1980's publications by Drs. Walter Rosskopf and Richard Woerpel



Often the bird will flap while coming out of injectable anesthesia, so I find that loosely wrapping in a towel helps. Eventually, the bird will stand up and walk out of the towel.

A paper sack also works well.

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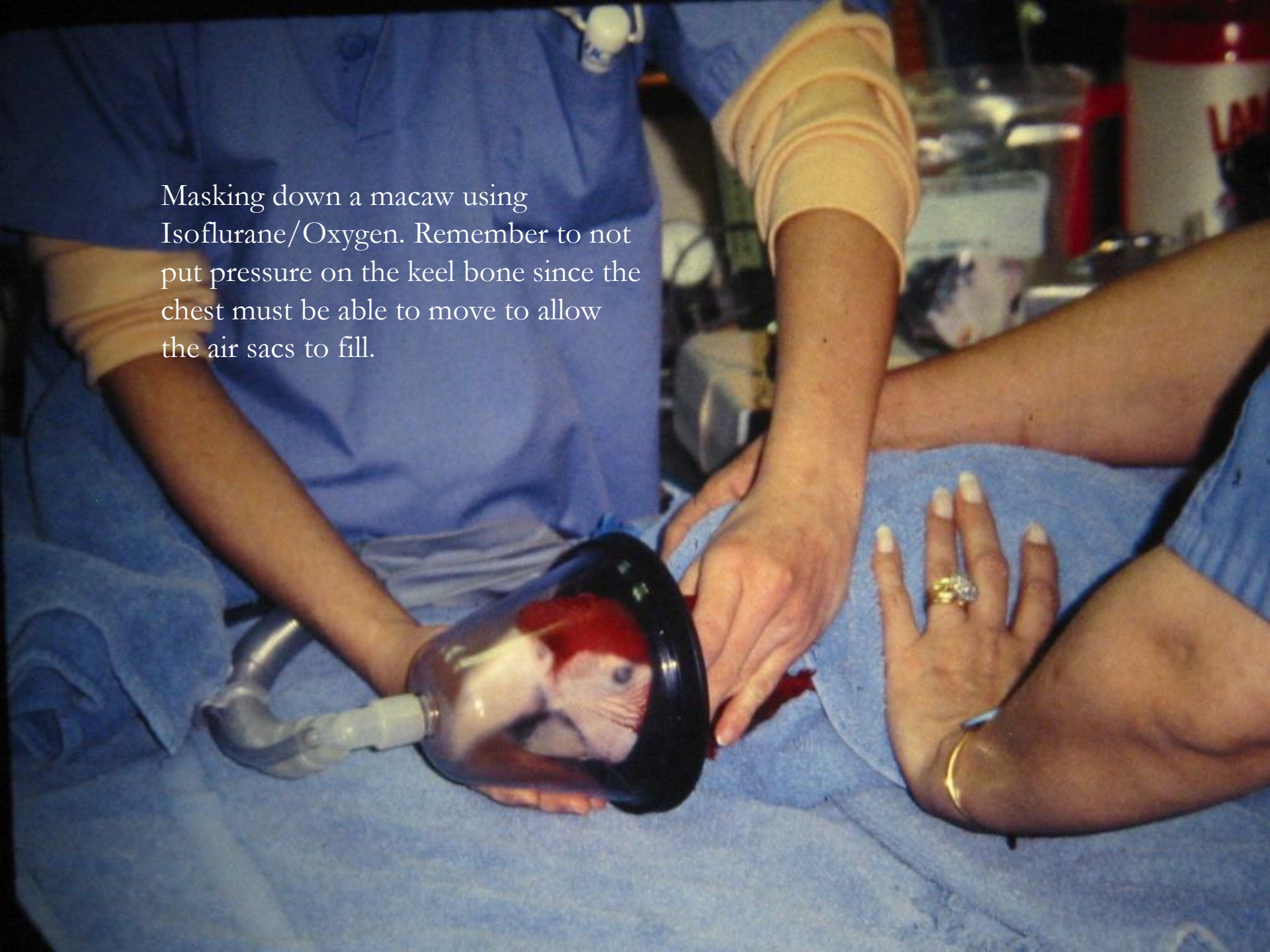
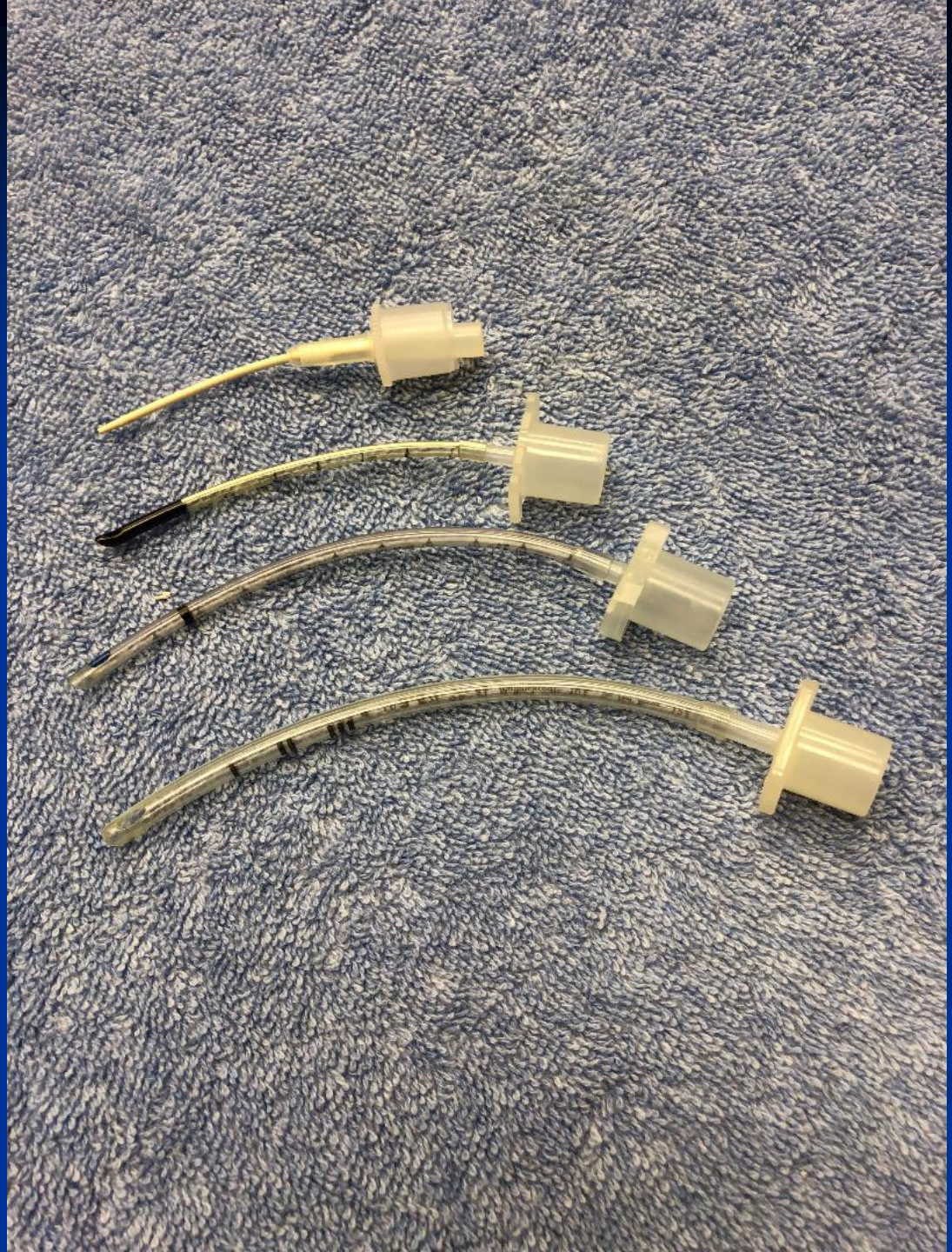


Masking down a macaw using Isoflurane/Oxygen. Remember to not put pressure on the keel bone since the chest must be able to move to allow the air sacs to fill.

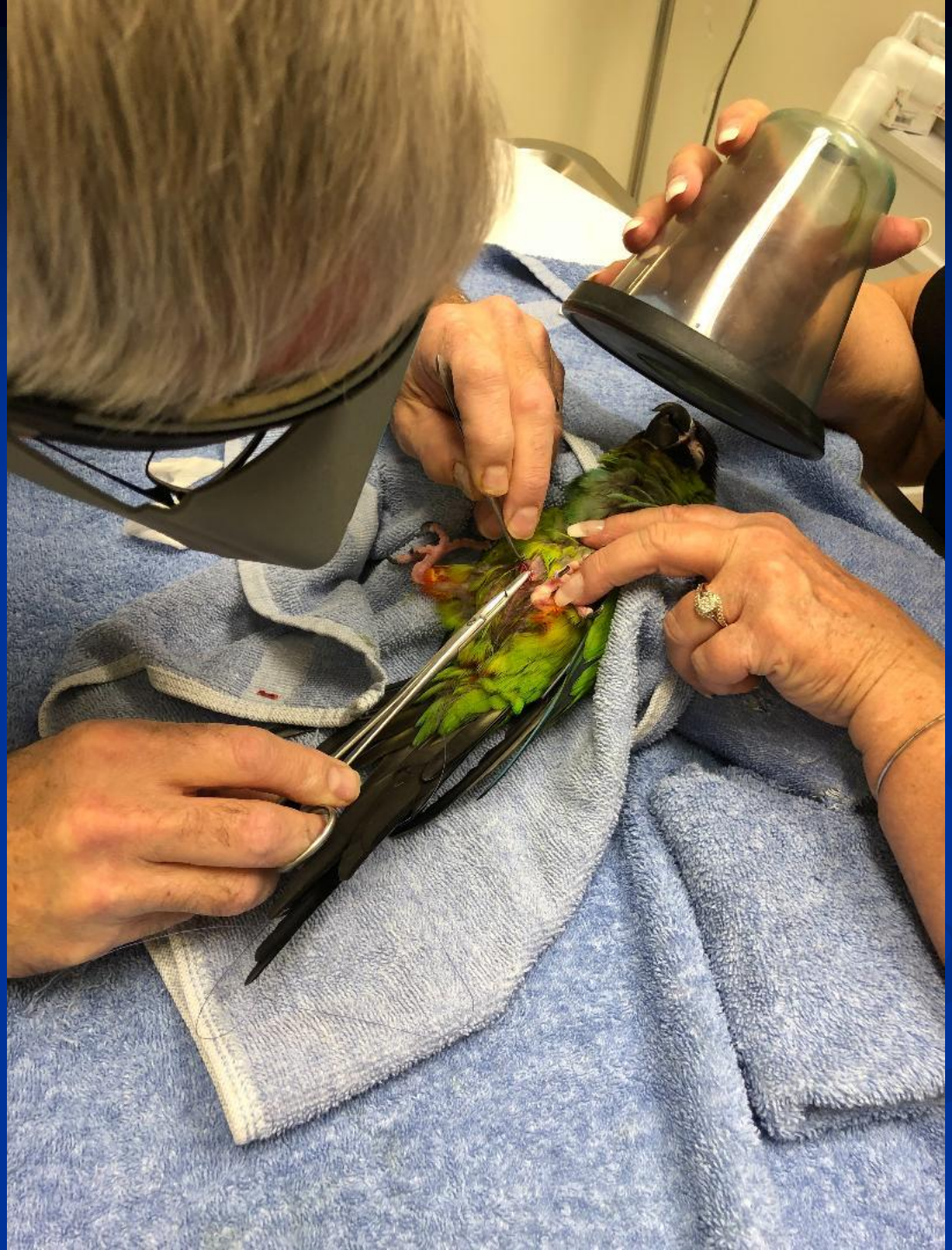
For larger birds, it is often wise to use a tracheal tube to provide an open airway. Use non-cuffed tubes (and I tape the tube to the beak to prevent it from dislodging.)



Some smaller birds especially such as pigeons and doves produce a mucus in the trachea that can block the tubes so care must be taken if used.

With gas anesthesia, an assistant needs to monitor the breathing very carefully to prevent the breathing from getting too slow.

Start decreasing the anesthesia by moving the mask away as the procedure is getting near the end.



We find it easier to regulate the anesthesia by moving the mask away from the bird as needed if the bird starts getting too deep since the decrease in anesthesia is immediate.

An Elizabethan collar was put on this bird as he was waking up to prevent him from chewing at the chest sutures. It will only be on him until the wound heals.

Feather Picking/Feather Destructive Behavior

* Can be caused by medical or behavioral situations
* Medical possibilities need to be evaluated such as bacterial dermatitis, abnormal feather growth (dysplasia), possibly allergies or irritants.
* The vast majority of feather picking birds are behavioral.
* Birds' waking hours are spent foraging for food, socializing, and grooming
    - *Where they forage for hours, we feed them in minutes giving them a lot of extra time during the day to either socialize or groom.
    - *Birds generally only touch each other when breeding or when fighting.
        - *Owners often stimulate their birds sexually by rubbing, grooming, or stroking their birds.
        - *This can cause a sexual relationship rather than a healthy "friend" relationship. The frustration that this causes can cause feather-damaging behavior.
    - *They can also spend this extra time grooming in an unhealthy way
    - *I also feel that many of the hand-fed birds have never been taught to preen properly by their parents or other adult birds.

One needs to decide if this is disease or feather-picking. Often feather-pickers will concentrate on the shoulders, chest and upper legs. It may advance to the back and wing feathers.

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African Grey Parrots and Cockatoos seem to be the most common feather-pickers in my experience.

Feather Picking/Feather Destructive Behavior

So…what to do?

*Stop stimulating the bird and develop a healthy "friend" relationship.

*Every bird needs a "job". Tearing things up is something that they do naturally and the items can be paper, cardboard, or wood.

*Increase the time spent eating by allowing the bird to forage and look for food.

*Allowing for enrichment of experiences such as play areas and flying around the house.

*Long ago, we would use Elizabethan collars but although the bird can't pick, it doesn't solve the deeper problem.

*If dealing with an anxiety situation, medications such as Haliperidol can be helpful.

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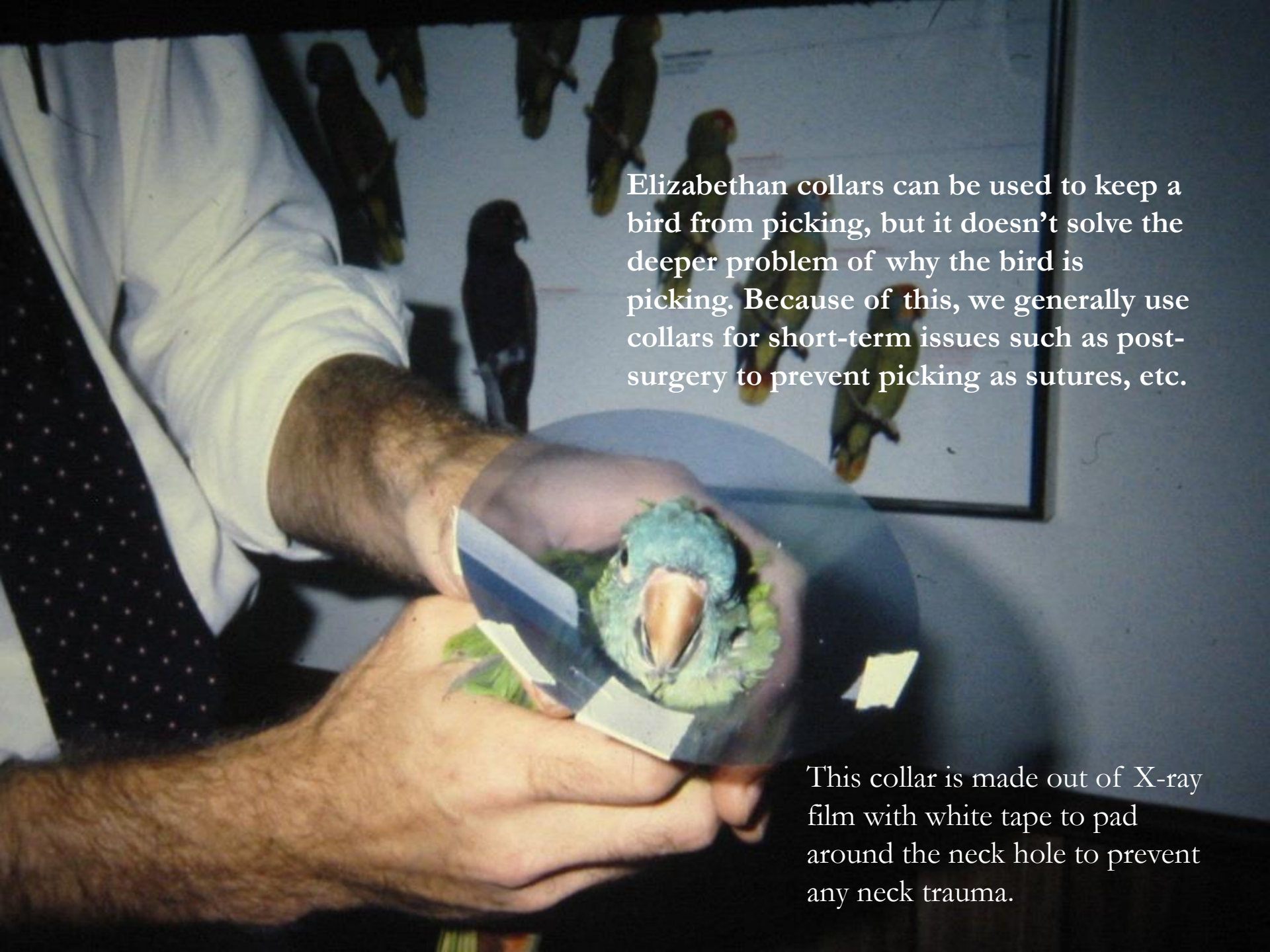
Some birds do well with
vests made by their owners.



Elizabethan collars can be used to keep a bird from picking, but it doesn't solve the deeper problem of why the bird is picking. Because of this, we generally use collars for short-term issues such as post-surgery to prevent picking as sutures, etc.

This collar is made out of X-ray film with white tape to pad around the neck hole to prevent any neck trauma.

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Haliperidol liquid is 2mg/ml. The way I use it is I dilute it 50:50 with distilled water (not regular water) making it 1mg/ml and then dose it at 0.1ml/500gms body weight. This is soaked into a treat or piece of small cracker that the bird will take as a treat. The medication is given in the morning then 8 hours later for anxiety (example: 8am and again at 4pm). The dose can be adjusted up or down 1-2 units (0.01-0.02ml at a time). It is easiest to measure out with an insulin syringe. The proper dose is achieved when the bird is slightly sleepy about 15 minutes after the dose. Hopefully, as they get better, the dose can be decreased. Some birds only need it during breeding season.


Questions?
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