

Veterinary Aspects of Birdkeeping



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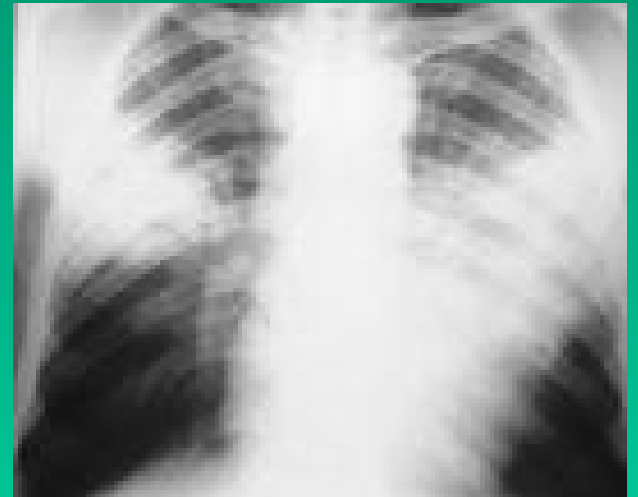


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Why do I need a vet?

- A prompt diagnosis facilitates correct therapy, supports animal welfare and is cost effective
- Very few diseases of cage birds respond to antibiotics! (*"The Yellow Powder"*)
- Zoonosis: people can catch Salmonella, Psittacosis, Yersinia and Tuberculosis.



Principles of Flock Medicine

Diagnosis

Clues from the history



- Husbandry
- Acute infection or poisoning
- Infestation or chronic infection

Investigation of a problem

- standard of husbandry
- recent import
- quarantine?
- any treatment given for Trichomonas?
- could it be infectious?
- ??cull for post mortem examination



Necropsy

- Health and Safety issues
- Lots of useful gross findings
- *Very few specific diagnoses possible without expensive ancillary tests*

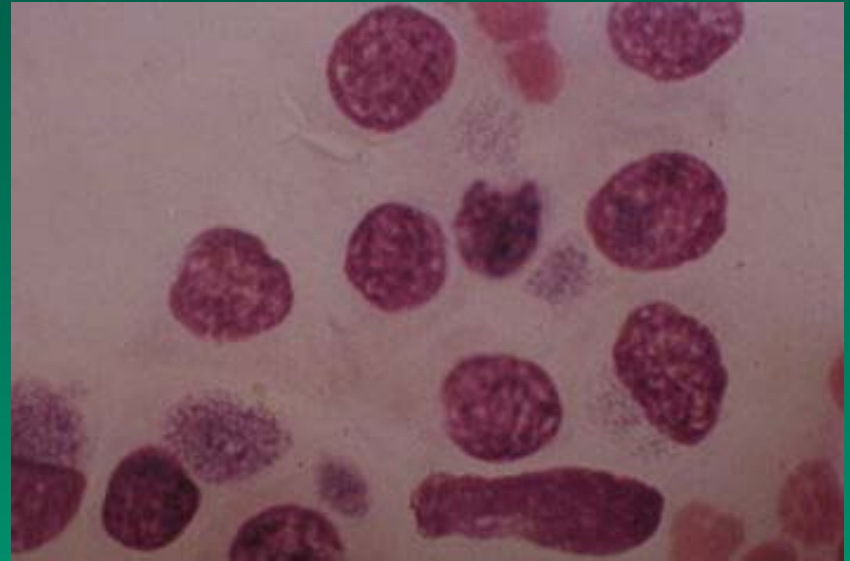


Chlamydiosis

- highly infectious
- *Zoonotic*
- asymptomatic carriers
- intermittent shedding
- shed following stress (movement/illness)
- no treatment guaranteed to eliminate organism from flock



Chlamydiosis (psittacosis)



- Conjunctivitis
- choanal inflammation
- diarrhoea/regurgitation
- any respiratory signs
- weight loss
- poor feathering
- Depression/anorexia
- "sick bird syndrome"
- neurological signs
- poor fertility
- increased neonatal mortality

Specific therapy for Chlamydiosis

- Consider slaughter policy
- (chlortetracycline in food - not water)
- (doxycycline in food)
- **enrofloxacin 200 mg/l in drinking water for 21 days**
- retest "cures" periodically

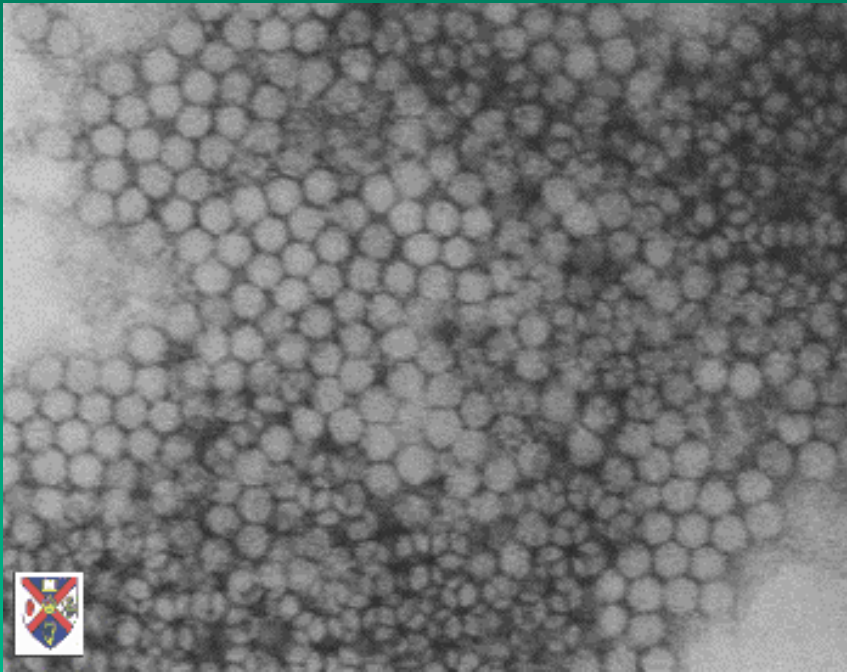


Psittacine Beak and Feather disease

- Circovirus - all birds
- African greys worst affected
- Causes French Moults in Budgies, Lovebirds and ringnecks
- Death with/without signs



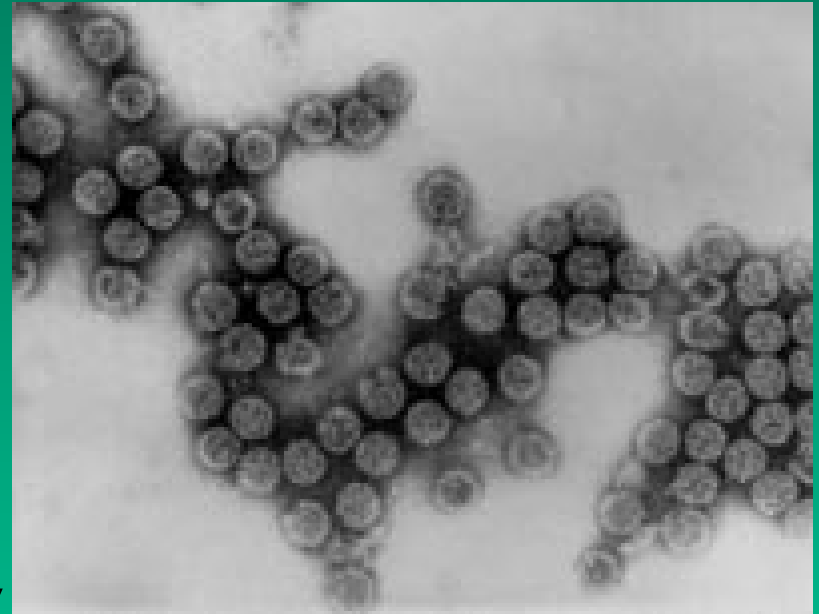
Positive PBFD result?



- Significant if feather abnormalities present
- If feathers normal: retest in 90 days by venepuncture (carrier or recent exposure)

Polyomavirus (Budgerigar Fledgling disease)

- Chicks in the nest
- swollen bellies, tremors, wobbly (abnormal feathers)
- larger birds can vomit/diarrhoea
- Classically 7 weeks old, death in hours
- Adult septicaemia



Respiratory Disease

- Birds have no diaphragm
- They have numerous air sacs

<i>Upper Resp tract</i>	<i>Lower Resp tract</i>
Mouth breathing	Change of voice, dyspnoea, tail bobbing
Nasal plug, discharge, sneezing	Insp/exp difficulty, coughing
Periorbital swelling, epiphora, head shaking	Exercise intolerance
Dyspnoea, exercise intolerance, yawning	Inappetance/vomition
Neck stretching, inflamed cere	

Therapy of Respiratory Disease

- Depends on diagnosis
- Chlamydia!
- Most URT has predisposing cause eg. Hypovitaminosis A treated by 30,000 IU/kg once weekly
- flush sinuses daily
- +/-parenteral antibiotics
- Most LRT disease is fungal (Aspergillus spp.), or occasionally Gram -ive bacteria
- *itraconazole orally*

Nursing the sick bird



- First Aid saves lives
- warmth
(80°F/26.5°C)
- semi-darkness
- extra fluid if not eaten or drunk for 24 hours
- fluids by crop tube



Fluid Replacement Therapy

Crop Tubing (metal/plastic with gag)



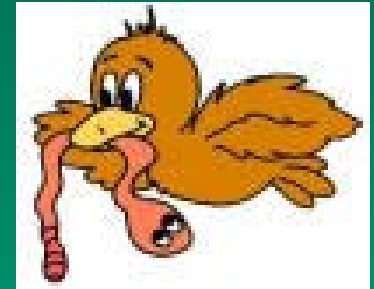
All vits/minerals, probiotics, antidiarrhoeals can be added this way

	Max Volume
Budgie/Lovebird	1 ml
Cockatiel	2 ml
African Grey/Amazon	7 ml
Cockatoo	10 ml
Large Macaw	15 ml

Capillaria Infestation

These gut parasites will cause:

- Diarrhoea
- "Going light"
- Sporadic deaths



Intestinal Parasites

- Ascarids (fenbendazole 100 mg/kg by crop tube) *Not if in moult*
- Capillaria (ivermectin 200 mcg/kg I/M or topically - repeat after 3 weeks)
(Spiruroids and Cestodes - Rare)



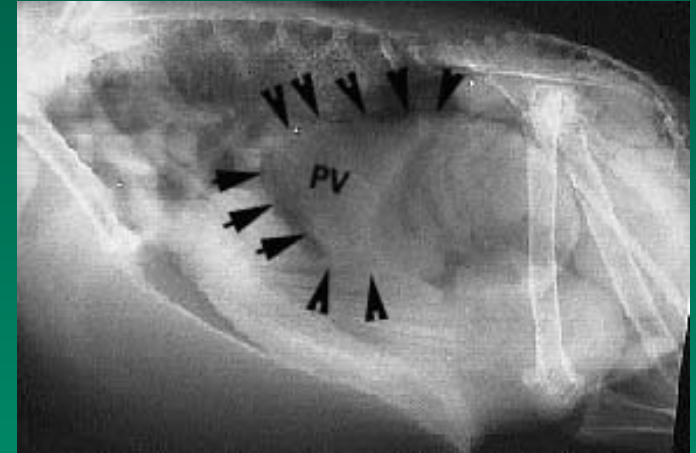
Levacide too risky now there are safer alternatives

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Regurgitation

- Systemic disease or crop disorders
- diagnosis by crop wash (Trichomonas, Candidiasis, bacterial)
- treat as appropriate (Emtryl, nystatin, amoxycillin)
- Prevention of candidiasis by dimetridazole in drinking water (2g/l for 7 days before breeding season)
- “Sour Crop” (antacids, antibiotics, liquid feeds, motility enhancers)

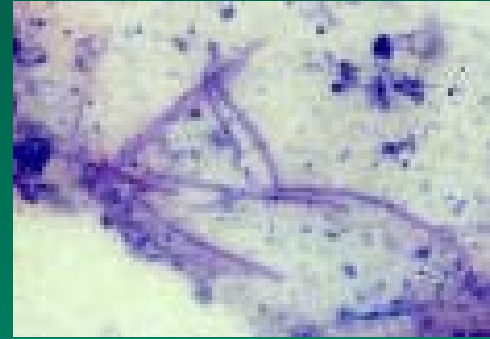
Psittacine Proventricular Dilatation Syndrome (PPDS)



- “Macaw wasting disease”
- Regurgitation with massive dilatation of proventriculus
- fatal - believed to be viral
- diagnosis: stomach biopsy



Megabacteriosis



- Causes diarrhoea and vomiting in budgies (distended crop)
- Gram positive bacteria in faeces and proventriculus
- treat with amphotericin B (1 ml/kg twice daily by crop tube (Fungilin, Squibb)), or ketoconazole

Feather and Skin Problems

- Moults generally annually after breeding
- can be 2-3 times annually (esp. budgies)
- large psittacines can take 2 years to complete a moult
- Prolonged moult has numerous causes - essential AA def, hepatopathy, hypothyroidism, renal disease
- “pin feathers” reflect recovery
- parasites

Feather picking



- full clinical examination
- skin parasites
- Biochemistry for hepatopathy
- Haematology
- Serology as appropriate
- Faecal parasites (Giardia in cockatiels)
- PCR PBFD/ Polyomavirus
- can look like chewers
- PCR faeces Chlamydiosis
- Feather follicle cytology

Viral Skin Problems



- Avipox (eventually heal - keep clean)
- PBFD - fatal circovirus infection (except in Lovebirds) - *blood test new stock - isolate until result known*
- Polyomavirus - often fatal - *treat by culling, and interrupt breeding for 3 months*
- Papilloma virus (warts)

Strategies to control disease

- “All in all out” where practicable
- Quarantine (6 weeks minimum)
- Buy from known “clean sources”
- consider testing new stock
- Disinfect premises, especially in hatchery
- “Fogging” or clean out and disinfect
- Vetark range or F10
- Screening tests and appropriate strategies to control

Annual tests for disease



- Tests on pooled faeces (collected over 10-14 days)
 - 1: Chlamydiosis (PCR/antigen tests)
 - 2: Intestinal worm egg counts
- Optional tests for
 - 1: Polyomavirus (Budgerigar Fledgling Disease)
 - 2: PBFD (Psittacine Beak and Feather Disease)

Use of Supplements



- best via food (vitamins often degrade in water)
- Avimix 3 times weekly in young or non-breeding birds
- Nutrobal if breeding
- Probiotics at times of stress/medication

Sources of Information

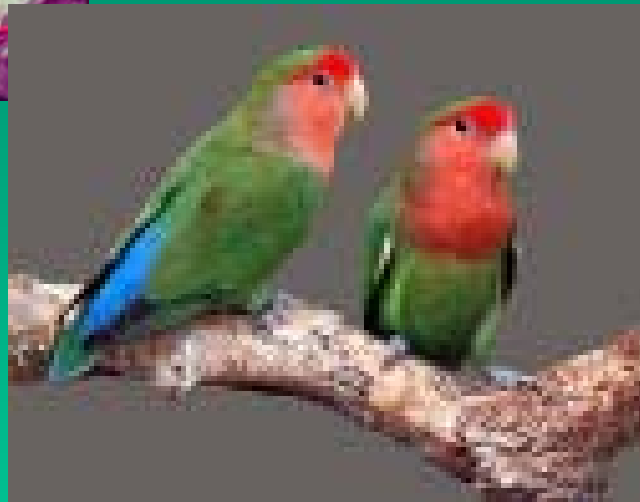
“The Vet”

“The Net” (beware non-peer-reviewed stuff)

www.vetark.co.uk

www.budgerigars.co.uk

(Dr John Baker, Liverpool)



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