Avian Chlamydiosis and Psittacosis

Chlamydia psittaci

Chlamydia psittaci is a common disease of many bird species and is caused by the bacterial organism Chlamydia psittaci. Birds should be aware that this is a zoonotic disease, meaning it can be transmitted from birds to humans, and also know its implications. The disease in people is called Psittacosis, or Parrot Fever.

Transmission

Transmission of the disease is primarily through inhaling respiratory secretions or contaminated dust from droppings or feathers of infected birds. Risk of infection is increased by close contact with infected birds that are shedding the organism, therefore, the disease is more common in stressed birds (shipping, overcrowding, or malnutrition) since birds tend to shed the organism when stressed. Infected birds do not have to show specific signs of the illness in order to transmit the disease.

Clinical Signs in Birds

The visible signs of chlamydia are typically respiratory or gastrointestinal in nature. Lime-green diarrhea or urates, is a common sign in many species. Although the disease is systemic, the signs primarily relate to the eyes, respiratory tract, and liver. Some birds may show general signs of illness: lack of appetite, weight loss, depression, diarrhea, discharge from the eyes or nares, or even death. However, birds may exhibit few visible signs of illness and these same signs can be associated with a number of other diseases. Some birds that are actively infected with Chlamydia psittaci may show no signs of illness. An infected bird may carry the organism and not become identifiably ill until some stressful incident brings it out, if at all. Breeding birds can pass the organism to their young. Baby birds are more susceptible to severe infection than adult birds and may die in the nest or soon after weaning.

Diagnosis

A confirmed diagnosis of chlamydia in a live bird is sometimes difficult and depends on the species, length of time since exposure, and general condition of the bird. Your avian veterinarian will conduct appropriate tests and evaluate the results in conjunction with a thorough examination. Current recommendations are that a suspect bird be given more than one type of test, along with evaluation of the bird's condition and history, to achieve a diagnosis. Some veterinarians recommend treatment of all suspected cases with or without a positive test result. It is very important to complete the full course of treatment as prescribed by your veterinarian.

Treatment

If chlamydia has been diagnosed, or if treatment has been recommended by your veterinarian, all exposed birds in the household should be treated at the same time to reduce the spread or recurrence of the disease. It is imperative that infected birds be isolated during treatment and that certain sanitary measures be employed to prevent spread or reinfection of the disease. The success of treatment depends on all of the medication being given in the recommended dosage and time frame. Antibiotic dosage and feeding should be directed by your veterinarian to ensure adequate levels are being consumed. Specific means of treatment should be determined by your avian veterinarian. Depending on the condition of the patient, other supportive treatment may be recommended as well. Your veterinarian will discuss the most appropriate treatment for your bird. Treatment must be continued for a minimum of 45 days. Depending on the state, a positive diagnosis may need to be reported to the state veterinarian.

During Treatment the Owner Must:

- clean the premises of all organic debris and then disinfect with an appropriate disinfectant such as a bleach and water solution (1:32 dilution or ¼ cup bleach per gallon of water), 1% Lysol®, or quaternary ammonia compounds for 5-10 minutes of contact time on the cleaned surface to be disinfected. Do not expose birds to the fumes of these disinfectants. Clean daily. Do not use a vacuum or pressure washer.
- use caution when handling droppings and cage debris, take care not to stir up dust while cleaning, keep dust and feather circulation to a minimum; it is recommended to wear gloves, coveralls or disposable gown, disposable caps, protective eyewear (goggles) and a properly fitted respirator mask such as an N95 particulate mask
- separate/isolate and seek medical care for other birds showing signs of disease;
- avoid contact with the birds by elderly, pregnant, sick or very young persons, immunosuppressed persons, or persons on anti-rejection drugs;
- remove all mineral supplements containing calcium as calcium interferes with some medications;
- reduce stress in the bird’s environment as much as possible; and
- follow all treatment instructions as prescribed by your veterinarian.
Psittacosis (Parrot Fever) in Humans

The bacterial organism *Chlamydia psittaci* is transmissible from birds to humans. If anyone exposed to an infected bird develops flu-like symptoms, that person should seek prompt medical care and inform their healthcare provider about having contact with birds. Treatment is simple and most often successful in humans, but neglect of the symptoms or delayed diagnosis may result in serious illness, even death, especially in compromised persons. *Chlamydia psittaci* is not the same organism that causes genital chlamydia infection in humans, which is due to a related organism called *Chlamydia trachomatis*.

Preventive Measures

The following recommendations help reduce the incidence of chlamydiosis in flocks or companion birds:

- immediately after purchase, take all newly-acquired birds to an avian veterinarian for chlamydiosis screening tests;

- buy birds from suppliers who routinely screen their birds for the presence of *Chlamydia psittaci* or who are willing to stand behind the health of their birds in some manner (health guarantee);

- isolate and quarantine all newly acquired birds for a minimum of six weeks;

- maintain appropriate preventative health management as recommended by your avian veterinarian;

- maintain good nutrition and minimize stress;

- maintain accurate records for at least a year as to bird ID, where and when purchased and from whom, date of illness.

For More Information on Birds

For more information on birds, ask your veterinarian for copies of the following AAV Client Education Brochures:

- Basic Care for Birds
- Behavior: Normal and Abnormal
- Avian Chlamydiosis and Psittacosis
- Feather Loss: Cause and Treatment
- Feeding Birds
- Health Exam for Birds
- Injury Prevention and Emergency Care
- Signs of Illness in Birds
- When Should I Take My Bird to a Veterinarian?

To Learn More About Chlamydiosis

To learn more about chlamydiosis please read the most recent edition of the Compendium of Measures to Control *Chlamyphila psittaci* Infection Among Humans (Psittacosis) and Pet Birds (Avian Chlamydiosis) from the National Association of State Public Health Veterinarians, http://www.nasphv.org/documentsCompendiaPsittacosis.html.

Online Resources

Follow AAV on Facebook (www.facebook.com/aavonline) for great tips and the latest news for pet bird owners. You can also find us on Twitter (@aavonline) and YouTube!

Our website, www.aav.org, offers a Find-a-Vet tool to help pet bird owners locate avian veterinarians around the world. We also offer a variety of resources such as basic bird care instructions and more. Visit the website today!

AAV offers bird clubs a monthly news bulletin for use in their newsletters. Clubs may contact the Publications Office (pubs@aav.org) for information.