

# THE BIRD CLINIC VETERINARY CORPORATION

# RECOMMENDED HEALTH CARE FOR YOUR PET BIRD

A proper healthcare program is very dependent on a particular bird species. An experienced avian veterinarian will understand these differences and be able to explain them to an owner. A good relationship with an avian veterinarian is the most important starting point. Have your bird examined as soon as possible after purchase. Your bird should have a thorough physical exam and testing (see below). The veterinarian should spend time explaining a proper diet, cage requirements, and behavioral traits specific to your bird species. This first exam will establish a great baseline to judge all future medical visits. The tests described below may not all be necessary and others may be required dependent on the species of bird, it's age, and the judgment of you and your avian veterinarian.

#### **BODY WEIGHT**

Routine precise weighing (in grams) of an individual bird is of key importance in determining its health status. Juvenile birds should demonstrate an incremental weight gain as they mature. For an adult bird its "healthy" weight should be consistent within a 1-4% range. Therefore, the value of this simple measurement is both diagnostic, as well as prognostic in dealing with a specific pet bird. Weighing your bird once a week in the morning, before feeding, is of the greatest value in "home healthcare" maintenance.

#### HCT / TSS

# (Hematocrit / Total Serum Solids w/ buffy coat, plasma evaluation)

This is an in-hospital screening test at The BIRD Clinic to evaluate the overall "Internal" condition of a bird. The hematocrit or pack cell volume (PCV) determines the percentage of red blood cells compared to the total blood volume. As a small sample of whole blood is centrifuged, the red cells migrate to the bottom. What remains are the white blood cells (WBC) and plasma. The white cell layer sits above the red blood cells and is referred to as the "Buffy Coat". This is a crude estimate of the total WBC count and could indicate a disease process requiring further testing. A blood smear is required to further quantify the WBC value and establish a "differential" for the number and various types of white cells. The plasma is then evaluated, documenting the volume, color, turbidity, refractive index, and fat levels. This may indicate dehydration, general body debilitation, liver problems, reproductive disease, or heart problems. This small sample of blood reveals a great deal of information about our pet birds and why:

# The BIRD Clinic recommends this test every year!

#### **GRAM STAIN**

This stain differentiates between two large groups of bacteria: Gram Positive (Gm +) and Gram Negative (Gm -). This is important because generally Gm (+) organisms make up the normal avian flora and Gm (-) organisms tend to be pathogenic with some exceptions. Humans have a predominant Gram Negative bacterial flora. This is why **mouth to mouth kissing of your bird is not wise** due to the possible transmission of pathogenic bacteria. This test can evaluate the type and number of bacteria in a sample and detect yeast or bacteria that cannot be cultured such as avian gastric yeast (AGY) or spirochetes. The BIRD Clinic recommends a gram stain of the choana (roof of mouth) and feces every year and please do not feed any bread (yeast) products 24hrs before this testing.

# **AEROBIC BACTERIAL CULTURE**

This evaluates the quantity, genus and species of bacteria from any body surface. This would be indicated if the gram stain revealed potential pathogenic organisms. The common areas tested are the oral cavity and fecal droppings. A culture is a <u>more</u> sensitive test than a gram stain. Once a pathogenic bacterium is identified, it can be tested against a group of antibiotics (sensitivity test) to determine which specific antibiotic could cure the infection.

#### PARASITE FLOTATION

Fecal floatation is a similar test to the one used in dogs and cats to detect internal parasites. Birds can harbor internal parasites such as *roundworms*, *tapeworms*, *coccidia*, *giardia*, *or capillaria*, as well as external parasites such as *biting lice* and *surface or burrowing mites*. With years of hand reared birds these are luckily not seen as much as years ago.

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## CHLAMYDIA PSITTACI (A Human Health Concern)

This disease goes by many names: Parrot Fever, Psittacosis, Ornithosis, and Chlamydiosis. For Psittacine birds as pets, this is perhaps the most important disease, as it is **CONTAGIOUS TO HUMANS**. The organism *Chlamydia psittaci*, lives / hides inside living cells of the birds' body, creating a carrier state in the bird. The organisms can be shed in the stool or oral/nasal secretions, especially if the bird undergoes some form of immune stress. The organisms, once shed, become airborne thereby **creating a risk to other birds or humans**. The problem with this disease is that in the acute form, birds can die in less than 24 hours, while in the chronic form they may "appear" perfectly healthy yet die slowly over many years from chronic cellular damage. Current tests include the Direct Complement Fixation (DCF), Antibody titers, and various polymerase chain reaction (PCR) antigen tests. **No single chlamydial test is 100% diagnostic**, as some birds fail to mount an immune response in acute infections or the species of Chlamydia origin may come from a cat, dog, or even a human. However, this test is VERY important to insure the bird's **TOTAL** health because if the bird is positive **it can be 100% effectively treated** and no longer pose a threat to the owner, the household, or any human/bird that comes in contact with the pet bird. The BIRD Clinic has seen 1000's of Chlamydia infected birds but with a proper diagnosis most were treated and cured. Guarding against this disease is the responsibility of all bird owners and a reportable disease in the State of California. Because of the risk to the owner's household and The BIRD Clinic's staff **All patients of The BIRD Clinic are required to have this test performed within one year of their first visit**.

# PSITTACINE BEAK & FEATHER VIRUS (PBFD) (Avian Aids Virus)

This was one of the most devastating airborne viral diseases of the pet bird industry. **There is NO cure**. PBFD is part of a small family of viruses called *Circoviridae*. The blood test for PBFD is very accurate from properly prepared samples. Positive young birds have a poorer prognosis than older birds if clinical signs are observed and often will die. There is no licensed vaccine in the United States. The BIRD Clinic recommends that all birds at risk be tested for PBFD and then not be exposed to other birds of unknown viral status.

### POLYOMA VIRAL DISEASE (PVD)

PVD is a subfamily of *Papovaviridae* named *Polyomavirinae*. Accurate blood testing is available. Positive young birds, especially before weaning, are at greatest risk of dying. Older birds often become lifelong carriers or can suddenly die. In 1996 a monumental breakthrough occurred with the release of a vaccine to protect against this terrible viral disease. The BIRD Clinic recommends that birds be tested for PVD. A polyoma vaccination program is especially important in any commercial breeding operation to protect against devastating outbreaks and death of numerous baby birds but not recommended currently in personally housed pet birds.

## **PSITTACID HERPES VIRUS (PsHv)**

Pacheco's disease virus is now known as the Psittacid Herpes virus. It causes both Pacheco's disease and mucosal papillomas and is linked to cancer of the liver and pancreas. In 2003-2004 research a swab/blood test was developed to find birds infected with this virus to help prevent further spreading. Finding carries is key before birds are comingled in one's home or in a boarding situation to prevent the death of another bird (see website for more details).

#### AVIAN BORNA VIRUS (ABV) / ANTIGANGLIOSIDE (AG) TESTING / BORNA SEROLOGY

First reported in 2008 to cause Proventricular Dilatation Syndrome (PDD). A Borna test was developed but only told us if the bird had the virus, but not if there was disease (think Chicken pox(herpes) vs Shingles). In 2019 the AG test was licensed in the US. This test actually informed us if the bird's body is reacting (immune mediated) to a process that is damaging nerves. This was a breakthrough but did not inform us of the origin of the immune response. In 2020 there was also a new therapy protocol to help these devastating cases that before always ended in death. In 2023 the U of Georgia and Dr Nemetz started using Borna Serology in an effort to finally determine if the immune response was from this virus or another agent and could be a HUGE step forward in helping more birds afflicted with this disease.

# **CONCLUSION**

Once a bird has been properly evaluated and tested for the appropriate viral diseases, the greatest risk to contracting a disease is in a non-regulated boarding facility. <u>Please also see our "Toxins in Pet Birds"</u> web handout to decrease the risk of harm in your pet bird. General check-ups every 12 months will insure your bird's long life by uncovering diseases in their early, more treatable state. A preventative health program has proved to save considerable money compared to the cost and time to treat a bird with an advanced disease condition.