



THE BIRD CLINIC VETERINARY CORPORATION



HEART DISEASE IN BIRDS

Diseases of the heart, peripheral arterial system (PAD), and therapies are well researched in the human field, but scientific and clinical literature in pet birds has been somewhat limited. Because of this, cardiac disease is often thought not to exist in pet birds except for unsubstantiated diagnoses of “heart attacks” in patients with sudden death incidents. Yes there is some severe pathology going on with a patient that suddenly dies but it is not due to the process of handling causing a normal heart to fail. However, atherosclerosis (fat plaques in the vessels), arteriosclerosis (hardening of the vessel walls), myocardopathies (defect in the heart muscle tissue), and cardiac electrical disturbances have all been diagnosed and documented in many bird species with some as young as 1 year of age! As birds get older these ailments have a higher frequency if a proper cardiac workup is performed

Diagnostics like **High Definition Digital Radiology (HDDR)**, **Electrocardiology (ECG)**, **Ultrasonography (US)**, and **Angiography with microCT scans (2020)** have revealed new information in clinically normal appearing birds. The BIRD Clinic in 2005 was the first in the world to utilize high resolution digital radiology to reveal organ detail, even in our smallest species, that was not possible in the past. Then in 2007 a board certified radiologist began performing cardiac ultrasounds and doppler blood flow measurements at The BIRD Clinic. This opened up a whole new world to pre-mortem diagnosis and management of cardiovascular disease in birds with some patients being managed well for over 8 years and now many patients living 5+ years past diagnosis with proper drug therapy.. Birds can have an array of cardiac abnormalities both congenital as well as acquired. Many of these abnormalities are definable and in many cases TREATABLE!

The key is to diagnose heart disease EARLY!

Once obvious symptoms, leg or wing weakness, difficulty breathing, seizures, occur due to inadequate blood flow to that portion of the body, the damage is often very advanced with a subsequent poorer outcome but many of these birds can be turned around and given a great quality of life.

All species on a high fat (predominately seeds and/or nuts) diet are susceptible. **Amazons (after 15-20 years of age)**, **Cockatiels (after 10-12 years)** and **African Parrots (after 25 years)** seem to have a highest risk for atherosclerosis and vascular compromise and should be evaluated earlier in life. **Female birds have a higher (2 to 1) risk than Males** and is correlated to chronic elevated Triglyceride levels from ovarian activity first reported by Dr. Nemetz in 2010 at the annual Association of Avian Veterinarian meeting in San Diego, CA.



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Similar to humans, birds with early or advanced cardiac disease **may be completely asymptomatic, or show symptoms that seem unrelated such as lameness, lack of coordination, seizures, difficulty breathing, diminished eyesight, or even sudden death**. The key is that the bird was NOT healthy 5 seconds before it had this sudden 'attack'. It was developing a problem over many years and then suddenly the heart or vessels failed.

A **CARDIAC WORK-UP** involves a thorough examination, followed by a full blood panel with serum triglycerides, protein electrophoresis, and whole body digital radiographs. If abnormalities are found, an ultrasound/ECG evaluation can document abnormalities in blood flow and cardiac rhythm. **The highest risk patient in general is 8-10 years of age or older.**

This publication is part of The BIRD C News™ series to help educate bird owners. Produced by The BIRD Clinic Veterinary Corporation 200 S. Tustin Street, Suite E, Orange, CA 92866-2322 (714) 633-2910. www.thebirdclinic.com May be reproduced with permission only.

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