

Proventricular Dilatation Disease

Proventricular Dilatation Disease is one of the newest diseases to be focused on by the avian veterinary community. Unfortunately, there seems to be more we do not know about this disease, than what we do know. Researchers at various institutions in the United States and Europe are working on this disease, so new information continues to come out at a rapid pace. The following is a summary of information up to this point.

What species are susceptible to Proventricular Dilatation Disease?

Proventricular Dilatation Disease or PDD has been reported in more than 50 species, including cockatoos, cockatiels, lovebirds, macaws, parakeets, Amazon parrots, conures, Eclectus parrots, and African grey parrots. Adults appear to be more commonly affected than juveniles.

When was PDD first recognized and what synonyms have been used?

PDD has been recognized since the late 1970s. Initially, this mystery disease seemed to be limited to macaws, and was termed macaw wasting or fading syndrome. Various terms have also been used to describe the pathologic features of this disease such as neuropathic gastric dilatation, myenteric ganglioneuritis, proventricular and ventricular myositis, psittacine encephalomyelitis and infiltrative splanchnic neuropathy.

What causes PDD?

The cause of PDD remains unconfirmed, however some research has implicated a viral agent. Since the cause of PDD is unknown, the route of transmission has not been confirmed but ingestion of feces may be involved.

What are the signs of PDD?

The proventriculus is the glandular portion of the bird stomach. Disease of the proventriculus leads to an inability to digest or absorb food normally. The most common clinical signs of PDD include depression, weight loss, regurgitation, and/or passage of undigested food in the feces. Abdominal distension, lethargy, weakness, diarrhea, scant feces, or an increase in the water component of the droppings have also been reported in some birds. Secondary bacterial and fungal infections are also commonly observed.

When the central nervous system is involved, signs may include wobbliness, abnormal head movements, or seizures. Some affected birds develop central nervous system signs in the absence of gastrointestinal abnormalities.

How do we determine if a bird has PDD?

This is difficult to do. A presumptive diagnosis of PDD is based on historical information, clinical signs, and radiographic evidence of a dilated proventriculus or proventricular dysfunction.

The best testing method at this time is to biopsy a piece of the crop under anesthesia. If a good sample is collected, this test is accurate 66% of the time as far as finding evidence of PDD, so a positive result is confirmatory. A negative result does not mean the bird does not have PDD. Unfortunately a negative crop biopsy does not rule out the presence of PDD. Biopsy of the stomach (ventriculus or proventriculus) is not recommended since obtaining a biopsy sample from these organs involves significantly more risk.

How common is PDD?

There is not an easy way to diagnose this disease, so the true incidence is unknown. It does seem to be a more common diagnosis as we look for it more often.

What can be done for birds with PDD?

Care focuses on providing as good a quality of life for as long as possible by feeding an easily digestible diet and managing other symptoms. Use non-steroidal anti-inflammatory drugs like celecoxib and meloxicam have also been associated with significant improvement in some individuals. Although disease does not develop in all exposed birds, isolation of affected birds is also strongly recommended.

How can I minimize the risk of PDD to my pet bird?

Adopting measures that reduce potential exposure such as quarantine of all newly acquired birds and scrupulous sanitation may significantly reduce risk of PDD in your pet bird.

References

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Written September 15, 2005; updated May 9, 2009.