Avian Borna Virus and Your Parrot

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Previously unknown, Avian Borna Virus has been recently identified in parrots suffering from proventricular dilatation disease (PDD).\(^1\) This novel virus is currently being studied intensively by a number of experts in the field and is thought to be the most common virus affecting companion parrots today.\(^2\) In fact, it has been shown that about 40% of clinically healthy birds may be positive for Borna virus. However, not all birds infected with Borna virus will develop PDD. The incidence of PDD is much less prevalent. The majority of infected birds are clinically normal.

At the present time, it is not entirely clear how birds acquire Borna virus. Since it has been found in feces, the “fecal-oral” route is suspected. Infections may also be acquired through the nasal and other sensory epithelium. Because young birds have been found to be positive from artificially incubated eggs, it is suspected that infection may even occur in the egg while still in the hen’s body. Borna virus is an RNA virus and is highly unstable in the environment. Therefore, routine disinfection (including 1:20 bleach and water) and good hygiene is likely to reduce risk of infection. There is currently no vaccine for Borna virus. Blood testing can be done by your avian veterinarian.

Healthy birds that are positive for Borna virus should be monitored for development of neurologic or gastrointestinal signs and feather/skin damaging behavior. Stress is thought to play a role in the development of clinical disease. As for any healthy bird, routine veterinary evaluations are recommended. This is especially important in birds that test positive. Nutrition should be optimized and body weight should be monitored.

Birds that develop PDD should receive proper veterinary care. There are several treatments that have been shown to improve the quality of life of (and in some circumstances, cure) affected individuals.

There is still a lot that we don’t know about Borna virus in birds. It appears that avian Borna virus does not grow in mammalian cells, so disease in humans is thought to not occur.

In summary, it appears that 1 in 3 healthy parrots may be infected with Borna virus, Although Borna virus is associated with PDD, most birds with Borna virus will lead normal lives.

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1. Update on PDD by Dr. Susan Orosz. Available at: http://www.birdexoticpetvets.com/index.php?option=com_content&task=view&id=48&Itemid=85