Polyomavirus Vaccination for Pet Birds

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What is avian polyomavirus?

Polyomavirus is one of the most feared, and often most misunderstood, viral infections of pet birds. This virus can infect many species of birds including pet parrots, finches, canaries, and chickens. Budgerigars (parakeets), Eclectus parrots, macaws, conures, lovebirds, caiques, and Ring-necked parakeets are considered particularly susceptible to infection. While polyomvirus is typically considered a disease of very young birds, adult birds can become infected and become carriers of the disease. These carrier birds, though they show no clinical signs of illness, are thought to be responsible for transmitting the disease to other birds. Transmission occurs via contact with contaminated feces, feather dander, crop contents or other aerosolized particles.

What are the signs of this disease?

Clinical signs associated with polyomavirus infection vary depending upon the age of the affected bird. Pediatric birds in the heavy pin feather stage are typically most severely affected. The most commonly observed signs include depression, loss of appetite, slow crop emptying, regurgitation, diarrhea, dehydration, and hemorrhage under the skin. Young birds usually die within 12-48 hours after developing clinical signs. A second form of the disease is characterized by weight loss, intermittent loss of appetite, poor feather condition and recurrent infections.

Is there a test for polyomavirus, and can it be treated?

A blood test is available to confirm if a bird is infected with polyomavirus. If a bird has died, it is important to perform a post-mortem examination and microscopic examination of its tissues for polyomavirus. This is particularly important if other birds have been exposed to the sick bird. Unfortunately, there is no known effective treatment for this disease

Can polyomavirus be prevented?

The best known method for preventing avian polyomavirus infections is through the use of a safe and effective vaccine. The vaccine used in our clinic is given beneath the skin over the birds' breast. The first time your bird receives a vaccination, he/she will need to receive a booster shot in 2 – 3 weeks. After this initial series, the vaccine is administered once each year, at the time of your pets' annual physical examination.

Are there side effects associated with vaccination?

Reactions to the vaccine are not common, but they can occur. The most commonly observed reaction is a yellowish discoloration of the skin or formation of a small lump at the site of the shot. These signs usually go away without treatment over a period of three to six weeks. Rarely, more serious reactions may occur, including the formation of a cyst or mass at the site of vaccination that requires medical or surgical treatment. Again, these types of reactions are rare. Any reaction should be reported to the veterinarian to determine if treatment is needed.

Should my bird(s) be vaccinated for polyomavirus?

To best protect the health of all of the pets that stay with us, it is a requirement that all birds that will board in our facility are vaccinated for polyomavirus Polyomavirus vaccination is also encouraged if you will be bringing new birds into your home, taking your bird to pet stores, bird shows or fairs, or if you board your bird in a facility where other birds are present. If you have questions or concerns about polyomavirus or vaccination, please ask. This is a scary disease, but with proper vaccination and attention to sanitation, the risk to your bird can be minimized.

In the case of an outbreak in the aviary/nursery, what do we do?

The use of closed aviary practices, in combination with vaccination, is the most effective means of preventing further spread of the virus. Disinfect everything that passes from one group or clutch of birds to another, including your hands, feeding instruments, incubators, and scales. Remove any birds showing clinical signs of disease, and do not introduce any new chicks into the diseased aviary. Maximize sanitation with particular attention to reducing dust, feathers, and aerosolized particles. Concurrent diseases or infections may be present that can increase the severity of the outbreak. These should be identified and addressed. If birds in the nursery have died, postmortem examination is strongly encouraged.

Vaccination, in combination with closed aviary concepts, can be an important means of controlling this virus. Neonates can be vaccinated starting at 21 days of age with a booster at 25 days of age. It is thought that "protective status" is achieved within two weeks of the booster vaccine (49 days of age). Breeding adult birds should also be vaccinated to prevent potential viral transmission to the nursery. Consider having a booster vaccine for adults annually.