

## **Proventricular Dilatation Disorder (PDD)**

### **About proventricular dilatation disorder**

Proventricular Dilatation Disorder (PDD) is a serious condition caused by a bornavirus, which is a very small virus. It is more common in pet budgerigars and macaws but can occur in most parrot species, and causes an overall loss of nerve function and a resultant inflammatory reaction in some areas of the body, particularly the gastrointestinal system.

### **Routes of transmission – how PDD is spread**

PDD can be transmitted through faeces (the brown to green part of droppings), urates (the white part of droppings), or passed from a parent to a chick through the egg.

### **Clinical signs (symptoms)**

The virus causes the body to attack its own nerves, causing clinical signs such as wobbliness, incoordination, tremors, seizures, weakness, blindness, lameness and other abnormal movements.

Gastrointestinal movement is also inhibited, so there may be accompanying gastrointestinal signs caused by dysfunction along the entire length of the gastrointestinal tract. These signs may include regurgitation (undigested food may be present), diarrhoea or very little faecal production (both of which may reveal undigested food within the faeces), and weight loss.

Affected birds may also become lethargic or depressed, and some may display respiratory symptoms as a result of aspiration pneumonia caused by regurgitation. They may therefore bob their tail or hold their wings away from the body when breathing, or sit with their legs a long way apart.

### **PDD, you and your birds**

PDD is not transmissible to people so does not pose a threat to human health. However, it can be spread between birds via secretions carried on clothing or shoes, so strict hygiene measures such as hand-washing and clothing changes should be adhered to.

### **Diagnosis**

Diagnosis includes a mixture of radiography (x-rays) and crop wall sampling, both of which are performed under general anaesthesia. However, affected birds are often very debilitated at presentation, so it may not be appropriate for them to undergo these tests. Blood tests may also be performed, but because bornavirus is only shed intermittently in the blood, false results may occur and a negative result may be obtained for a bird that is affected.

A diagnosis can also be confirmed by performing a post-mortem examination on birds that have passed away, and may be recommended in cases where there are multiple birds in one household.

### **Treatment**

Sadly, successful treatment of PDD is rare, although not unheard of. Treatment will usually involve intensive supportive care to provide fluid therapy and nutritional support via a feeding tube whilst your pet fights the disease. They may also need pain relief as well as other medications to prevent or treat secondary infections. Full recovery can take many weeks or even months, and the bird may suffer from permanent nerve damage. The prognosis for recovery remains poor, and for birds that survive the virus, the prognosis remains guarded because of the permanent damage to the nerves.

### **Preventing the spread of PDD**

PDD is highly infectious and the patient should be isolated from other birds in a separate room, even after recovery. Recovered birds may become carriers of the disease, so can act as a constant source of infectious material to healthy birds despite no longer showing signs of clinical disease themselves.

Living quarters should be thoroughly disinfected with quaternary ammonium compounds such as F10 or bleach. Birds that have come into contact with the patient should be carefully monitored for clinical signs of the disease.