AVIAN POX

Office of Fish and Wildlife Health and Forensics

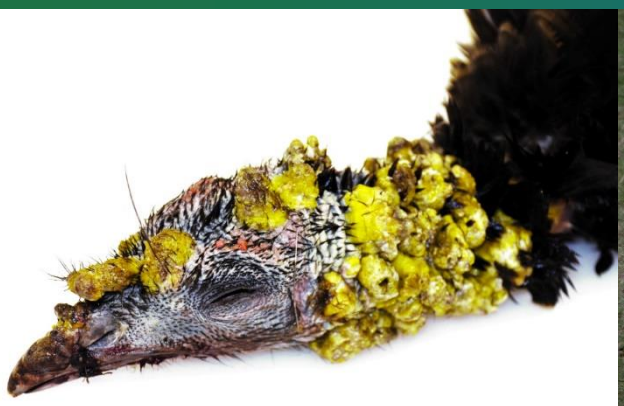

Photo courtesy of the Southeastern Cooperative Wildlife Disease Study (SCWDS)

Introduction

Avian pox is caused by a poxvirus. The specific strain of virus varies greatly depending on the infected species. There are over 20 genera in the *Poxviridae* family, including many that affect humans. Avian poxviruses specifically are not known to infect humans. These are not to be confused with chickenpox and shingles, which are caused by human herpesvirus 3 (varicella-zoster virus).

Species Affected

Many wild bird species worldwide have been documented to be affected by avian poxvirus. This includes wild turkeys, finches, doves, and others in the United States.

Clinical Signs

The most noticed clinical sign of avian pox infection is the growth of wart-like lesions on the featherless portions of the body. In turkeys, this is most apparent on the head and wattle. These birds may survive the infection with lasting scars. However, there is risk for secondary infection and increased risk of predation if vision is impaired.

Growths can also appear as yellow, caseous growths in the same areas. These more severe cases of avian pox are referred to as diphtheritic. Birds with diphtheritic or “wet” avian pox may suffer from anorexia, difficulty breathing, and death.

Transmission

The avian poxvirus is transmitted through insect vectors such as mosquitos, mites, flies, and midges or gnats. As with many viral diseases, blood containing the virus is transmitted between individuals.

There is additional transmission that can occur through the environment via contact with materials that an infected bird touched, or via direct contact with the infected birds, due to the outward expression of viral lesions.

Diagnosis

Differentiating avian pox from other conditions such as lymphoproliferative disease is necessary due to the similarity in appearance. This is done through histology, serology, or PCR.

Epidemiology

Avian pox viruses are distributed worldwide except for the most extreme latitudes. There are over 20 genera in the *Poxviridae* family. The most familiar is likely *Orthopox virus variola*, which causes smallpox in humans.

Additional Information

Penn Vet | Fact Sheet Detail (upenn.edu)

Avian Pox (pa.gov)

Avian Pox - Kentucky Department of Fish & Wildlife

Avian Pox | FWC (myfwc.com)

Cover images: SCWDS, PGC