

AN OUTBREAK OF POX IN IMPORTED MYNAHS

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Chronic corneal and conjunctival lesions occur frequently in imported mynahs. A complex of eye lesions previously described included proliferative lymphocytic conjunctivitis, keratitis, chronic corneal ulcers, and eyelid deformations. Many of these birds also had areas of scar tissue with feather loss on the head. No known etiology was established. In this case report, a flock of imported mynahs was affected with avian pox. These birds had lesions similar to those previously described and also similar to those chronic post pox lesions observed in psittacine birds. 1,2

In September, 1985, 1055 greater hill mynahs (*Gracula religiosa*) were received from Malaysia. All birds were immature and were handfed in quarantine. Eye, wattle, and oral lesions were observed in some birds on arrival. Two birds were dead on arrival and 42 birds (3.9%) died in quarantine.

On the day of release from quarantine, 434 birds were surveyed to determine the morbidity rate. Of these 434 birds, no eye lesions were observed in 285 (65.6%); 92 birds (21.1%) had corneal edema; and 57 birds (13.1%) had scabs on their heads, beaks or eyelids suggesting active pox virus infection.

Scabs were harvested and placed in a solution of 50% glycerine in normal saline for virus isolation. Avian Pox virus was isolated on the chorioallantoic membrane of embryonated chicken eggs. Similar tissues were fixed in 10% buffered formalin for histopathologic examination. Eosinophilic cytoplasmic inclusion bodies typical of pox virus infection were observed in epithelial cells in and around the lesions. No attempt was made to treat the pox lesions. Unaffected and recovered birds were sold.

Three months later, 45 birds, retained primarily because of residual ocular problems, were examined. Each eye was recorded as normal or as having lid distortion, lid depigmentation, corneal crystals or scars, keratitis or corneal ulcer, proliferative conjunctivitis, or cataract.

The most commonly found lesions were lid distortion (32.2 %) and eyelid depigmentation (23.3 %). Table #1 These showed a prevalence similar to that found in blue fronted Amazon parrots (*Amazona*

aestiva) and blue headed pionus parrots (*Pionus menstruus*) post parrot pox. Cataracts were present in 16 eyes (17.7%), 9 which also had lid distortions. Only one of these eyes had iris adhesions suggesting previous uveitis. 1

Four (4) birds (4.4%) had healed corneal damage while 11 (12.2%) had active corneal and conjunctival lesions compatible with the punctate keratitis/ conjunctivitis complex previously described. 2

DISCUSSION

This is the first known reported case of pox in mynahs. Active and residual lesions of the eyelids, corneas, and beaks were similar in appearance and prevalence to those described in pox infections in psittacine species. However, morbidity and mortality rates in the mynahs were much lower. Pox virus infection was confirmed by histopathologic examination and virus isolation.

Previously described eye disorders in mynahs were very similar but no etiology was determined. Eyelid scabs and cataracts had not been seen in flocks of mynahs with keratitis and proliferative conjunctivitis. There remains the possibility that more than one pathologic agent may have been active in the flock of this report.

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REFERENCES;

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TABLE #1

PREVALENCE OF EYE LESIONS IN MYNAHS 3 MONTHS POST POX;

N = 90 eyes

Normal eyes	40 (44.4%)
Lid deformity	29 (32.2%)
Lid Depigmentation	21 (23.3%)
Cataract	16 (17.7%)
Keratitis/ulcer	11 (12.2%)
Corneal crystals/scars	4 (4.4%)
Proliferative conjunctivitis	4 (4.4%)
Iris adhesion	1 (1.1%)
Ptosis	1 (1.1%)