

AN OUTBREAK OF POX DISEASE IN PIGEONS

N. Pazhanivel¹, S. Vairamuthu², Andrew Chandra Mohan³, Parimal Roy⁴ and V. Purushothaman⁵

Central University Laboratory
Centre for Animal Health Studies, Madhavaram Milk Colony, Chennai-51

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Avian pox is a contagious, slow spreading viral disease of birds which occur all over the World (Tripathy and Cunningham, 1984). The lesions produced by pox viruses may be cutaneous and/or diphtheritic (Wet pox). Cutaneous lesions may occur as papules, pustules or crusty scabs, depending on the stage of the infection (Boosinger *et al.*, 1982). Large cytoplasmic viral inclusions (Bollinger's bodies) are frequently present in infected epithelial cells (Whiteman and Bickford, 1979). Pigeon pox is a slowly developing disease which leads to morbidity and mortality in all age groups of pigeons. In natural infection mortality is low but can be complicated with parasitism or poor condition of the flock (Singh *et al.*, 1990) Present paper describes an outbreak of pox disease in pigeons.

In a private farm of 211 pigeons, 12 pigeons died over a period of 15 days. The pigeons were belonging to age group of 3 to 6 weeks and clinical signs included nodular growth over the base of the

break and head, in appetite, restlessness and ruffled feather. One dead pigeon was brought to the Central University Laboratory, Tamilnadu Veterinary and Animal Sciences University, Chennai-51 for post mortem examination and diagnosis of the disease. External examination revealed nodular growths covered with scabs in the head, around the neck and base of the beak. Necropsy examination revealed no specific lesions.

Scab samples were crushed, smeared and stained with Wright's Giemsa stain. Scab samples were also collected in 3% gluteraldehyde for electron microscopical examination.

Smear of scab samples revealed intracytoplasmic eosinophilic elementary bodies in the epithelial cells suggestive of the involvement of pox virus (Tripathy and Hanson, 1976). Electron microscopy confirmed the presence of numerous brick shaped pox virus particles measuring about 280x210 nm (Fig.1) in scab samples.

¹ Assistant Professor, Dept., of Veterinary Pathology, ³ Associate Professor and Head, Central Instrumentation Laboratory, Madras Veterinary College, Chennai-7, ² Assistant Professor, ⁴ Associate Professor, ⁵ Professor and Head, Central University Laboratory, Madhavaram Milk Colony, Chennai-51.

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In the present study mortality rate was only 5.2%, similar low mortality has been reported earlier (Tripathy *et al.*, 1991). Although skin lesions were suggestive for pox disease but confirmatory diagnosis was made by electron microscopy. The farmer was advised to vaccinate the unaffected pigeons with Fowl pox vaccine as it has been reported that the exposure to one viral strain may provide immunity against another strain (Boosinger *et al.*, 1982). The farmer was also asked to maintain the flock hygienically and give antibiotics to control secondary bacterial infection. Subsequently the mortality was controlled.

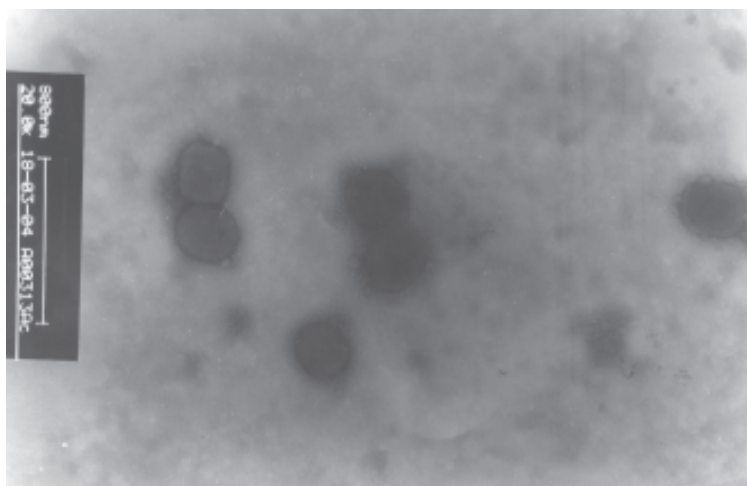
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Pigeon Pox Virus