Avian Pox Virus
An Ultrastructural Study on a Cherrug Falcon

Brief Report

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Summary

The ultrastructure and maturation of avian pox virus particles is described in the rare case of a naturally infected hawk (Falco cherrug). As in other cells infected by fowlpox virus two types of inclusion bodies are encountered in the cytoplasm: firstly assemblies of fluffy filamentous material apparently giving rise to immature virions. They are thought to present virus factories (inclusion body B). Secondly mature virus particles budded into extensive groupings (Bollinger bodies, inclusion body A) which display a fine structure identical to other strains of fowlpox virus.

In contrast to domestic fowl, infection by avian pox virus is a rarely occurring event in birds-of-prey (2, 3, 4, 8), so that pathogenicity has even been doubted. Scarcity of reports concerning the ultrastructure and morphogenesis of pox viruses in a naturally infected and in-vivo-system warrants a brief study by electron microscopy.

We had the opportunity\textsuperscript{1} to examine a female hawk (Falco cherrug) kept for falconry in the Arabian Gulf area. This raptorial bird showed all signs of a severe pox virus infection which finally caused its death; further details are recorded by Kiel et al. (7).

\textsuperscript{1} We are greatly indebted to His Highness Sheikh Sultan Bin Zayid Al Nihayyan from Abu Dhabi for his kind permission to examine the falcon.