

VELOGENIC NEWCASTLE DISEASE VIRUS IN CAPTIVE WILD BIRDS

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ABSTRACT

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Newcastle disease virus (NDV) was isolated from the faeces of seven different species of clinically healthy captive wild birds. All seven NDV isolates were characterized as velogenic, based on the mean death time in embryonated hens' eggs and the intracerebral pathogenicity index in day-old chicks. Three of the isolates were placed in group C₁ based on the reactions with monoclonal antibodies. The role of captive wild birds in the epidemiology of Newcastle disease is briefly discussed.

INTRODUCTION

Newcastle disease (ND) causes losses in many species of birds, including commercial chickens. About 8000 species of birds seem to be susceptible to infection with Newcastle disease viruses (NDVs) (Kaleta and Baldauf, 1988). A wide range of avian and non-avian species act as reservoirs of NDV and transmit the disease to susceptible birds. In Nigeria, velogenic, mesogenic and lentogenic strains of NDVs have been found in wild birds which were considered as sources of infection to susceptible village poultry (Olabode *et al.*, 1992). Psittacines can harbour and spread virulent NDV (Awan *et al.*, 1994). This paper records the isolation of velogenic NDVs from apparently healthy captive wild birds.

MATERIALS AND METHODS

Virus isolation

Twenty faecal samples were collected from 20 different species of healthy captive wild bird from the Arignar Anna Zoological Park, Chennai, India. The samples were processed and inoculated into 10-day-old embryonated hens' eggs for virus isolation as described by Alexander (1988).