HANTAVIRUS ISOLATION FROM BIRDS

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Received December 11, 1990

Since 1976, when hantavirus was first isolated from field mice (*Apodemus agrarius*) (1), many reports have described hantavirus isolation from patients with haemorrhagic fever with renal syndrome (HFRS) from at least 25 animal species belonging to 4 mammalian orders (Rodentia, Insectivora, Lagomorpha, Carnivora) (2) as well as from chiggers *Trombicula scutellaris* (3). Here we present data on the first hantavirus isolation from birds.

When lung suspensions were tested from birds captured in the Far East region of Russia the hantavirus antigen was detected by ELISA in 13 species belonging to 5 orders, namely Columbiformes, Passeriformes, Galliformes, Strigiformes and Ciconiformes. However, out of 6 ELISA-positive species of birds only 1 hantavirus strain was isolated in Vero-E6 cells from Yellow-throated-Bunting (*Emberiza elegans*). The isolate was typed by indirect immunofluorescence and by virusneutralization tests using human convalescent sera of HFRS patients from European and Far Eastern foci of hantavirus infection, using rat immune sera raised against hantavirus strains isolated earlier over the territory of CIS and, finally, evaluating monoclonal sera against strains Hantaan-76-118 and SR-11. It was found to belong to the first serotype (Apodemus) according to recent classification (4).

Our experience with hantavirus presence in birds needs further confirmation based on investigations of the possible role of birds in hantavirus circulation, the maintenance of this virus in nature and for infection of man.

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