

ACUTE HAEMORRHAGIC FEVER WITH RENAL SYNDROME (HFRS) IN AUSTRIA

E. V. Leschinskaya, E. A. Tkachenko, T. K. Dzagurova, S. G. Drozdov

Institute of Poliomyelitis and Viral Encephalitis, AMS U.S.S.R., 142782 Moscow, U.S.S.R.

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Hantavirus has been recognized to cause HFRS in different countries of Western Europe (1-5). Here we report the first HFRS human case which was registered by us in south Austria.

A 21-year-old man, civil servant had arrived to Moscow from Austria (Kleinkirchheim town) on December 29, 1989 and fell ill by January 4, 1990. The disease started with fever (temperature 40.4°C), headache, myalgia, dryness in mouth, nausea, vomiting, lumbar and abdominal pain, pharyngeal and conjunctival injection, blushing, nosebleeding. Clinical examination and admission (January 8, 1990) revealed bradycardia, blood pressure 110/80 mm Hg, hepato- and splenomegaly. Diuresis was 150 ml/24 hr and oliguria continued for next 2 days when maximal urine volume per 24 hr was 350 ml; later on it increased to 800 ml, 1,200 ml, 2,500 ml, respectively. Blood tests on 6th and 10th days after onset of fever included an erythrocyte sedimentation rate 10 and 8 mm/hr leukocytes 14.0×10^9 and 7.0×10^9 . Serum creatinine was 3.43 and 10.0 mg%, urea in blood 18.6 and 30.8 mmol/l, respectively. Urinal tests on 6th, 8th, 9th and 10th days after the onset of fever included protein 6.6, 0.6, 0.3 and 0.09 g/l; erythrocytes 200, 1-2, 1 and 0; leukocytes 0, 1-2, 7-8, 3-4; single hyaline and grainy cylinders per field; specific gravity 1012, 1008, 1008 and 1006, respectively. January 17, 1990 the patient was discharged in a satisfactory state.

The clinical diagnosis of HFRS was confirmed by detection of specific fluorescent antibodies to Hantavirus strains (Table). The highest antibody titre was detected to CG-1820 strain of the second Hantavirus serotype associated with bank vole (*Cl. glareolus*) rodents, the natural reservoir of Hantavirus in most Western European countries. The patient lives in a wooded area and two weeks before the onset of disease he often came across wild rodents while going to the barn located near his house. This case confirms the existence of indigenous HFRS in Austria. Further clinical and epidemiological investigations on HFRS in Austria seem reasonable.

Hantavirus strains	Titre of antibody	
	Sample 1 day 6 after onset	Sample 2 day 12 after onset
Hantaan 76.188 (<i>Apodemus</i> or 1st type)	1:64	1:256
CG-1820 (<i>Clethrionomys</i> or 2nd type)	1:1024	1:8192
Tchoupitoulas (<i>Rattus</i> or 3rd type)	1:64	1:256
Prospect Hill (<i>Microtus</i> or 4th type)	1:256	1:2048

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