

Puumula virus

General:

Hanta viruses are RNA viruses of several serotypes and belong to the group of the Bunyaviridae. They can cause different clinical pictures of hemorrhagic fever with renal syndrome (HFRS), syn. Korean hemorrhagic fever (KHF), nephropathy epidemica. Rodents are considered a reservoir, the viruses can be found world-wide and the incidence of hanta virus infections is approx. 200,000 cases annually. In Germany at least 2 serotypes occur endemically: puumala-viruses (carrier is a mice species, *Myodes glareolus* in the South and the West) and dobrava-viruses (another mouse: *Apodemus agrarius*, in the North and the East).

Risk groups are forest workers. The infection occurs through smear infections, aerosols, or by water contamination with infectious excrements or urine of the rodents. After an incubation period of 5-35 days clinical symptoms usually occur suddenly. At the beginning an acute interstitial nephritis with high fever, lumbalgia and hemorrhagic diathesis are present. Kidney failure, concomitant symptoms such as hypotonia with shock and pulmonary edema can occur. The lethality of the KHF is approx. 10%. The diagnosis is done serologically by testing IgM antibodies in the first days of the disease.

The following tests are available:

- **Hantavirus IgM antibodies**

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

- **Hantavirus IgG antibodies**

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

- **Hantavirus IgM immunoblot**

Material: 1 ml serum

TAT: 7-10 days*

Method: western blot

Ref.- range: see report

- **Hantavirus IgG immunoblot**

Material: 1 ml serum

TAT: 7-10 days*

Method: western blot

Ref.- range: see report

- **Puumalavirus IgM antibodies**

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

- **Puumalavirus IgG antibodies**

Material: 1 ml serum

TAT: 7-10 days*

Method: EIA

Ref.- range: see report

For complete list of laboratory test offered at Freiburg Medical Laboratory, please visit <http://www.fml-dubai.com/parameter-listings/>