Getah Virus

The clinical disease has never been reported in Australia.

Getah virus is a mosquito-borne virus that can cause a mild, self-limiting illness in horses. This virus is widely distributed from Eurasia to Australasia, and antibodies have been found in many species of animals. However, clinical disease seems to be very rare. The first known outbreak occurred in Japan in 1978; it affected racehorses at two densely populated training stables. A small number of cases was also reported in Japanese horses in 1983. In 1990, clinical disease was reported outside Japan, at a thoroughbred breeding farm in India.

Getah virus is a member of the Getah subgroup in the genus *Alphavirus* and family *Togaviridae*. There are at least eight strains of this virus, which appears to mutate fairly often. Sagiyama virus, which is found in Japan and causes identical symptoms in horses, is very closely related to Getah virus. Some researchers consider Sagiyama virus to be a strain of Getah virus.

Getah virus appears to be maintained in a natural cycle between mosquitoes and various vertebrate hosts. This virus seems to be transmitted mainly by various species of *Aedes* and *Culex*; the specific vector varies with the climate and geographic region. The amplifying hosts are thought to include horses, pigs, and possibly other species such as rodents.

Getah virus is also directly contagious between horses, probably via aerosols or direct contact with nasal secretions. This route is thought to be uncommon; high doses of virus are needed to establish intranasal infections, but only small amounts of virus are found in the nasal secretions of naturally infected horses. Getah virus has not been recovered from the feces or urine of horses.

The incubation period in horses is short. Horses infected experimentally by the intranasal route become symptomatic in 3 to 4 days. After intramuscular injection, the incubation period is 2 to 6 days.

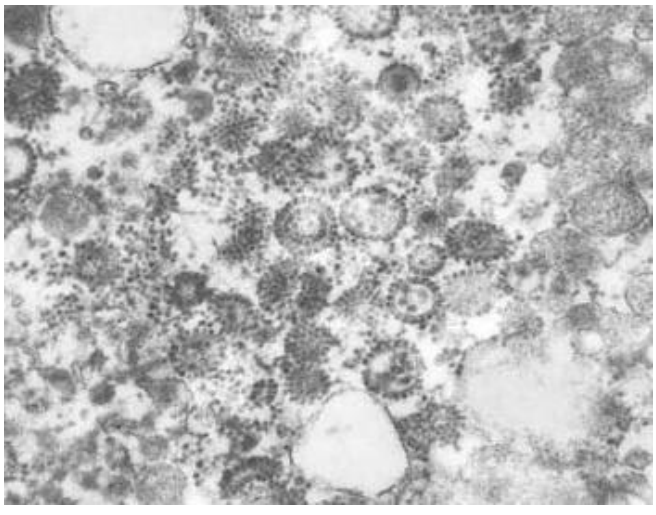
In horses, Getah virus infection is a mild, self-limiting illness characterized by fever, hind limb edema mainly in the fetlock, and stiffness. Swelling of the lymph nodes, mild abdominal pain, depression, and scrotal edema have also been reported. A rash is occasionally seen. This rash consists of 3-5 mm papules mainly on the neck from the shoulder to the forearm, and over the hindquarters from the thigh to the gaskin.

Serous nasal discharge has been reported in experimentally infected horses but not in natural cases. In some horses, the clinical signs are limited to one or two symptoms such as fever alone, fever and a skin rash, or fever and limb edema.

Getah virus does not seem to cause abortions or birth defects in horses; pregnant mares delivered normal foals after an outbreak at a breeding farm in India. Horses recover fully in approximately 1 to 2 weeks.

Deaths have not been reported in naturally infected horses but the virus may be responsible for some fetal deaths.

The differential diagnosis includes equine viral arteritis and the mild form of African horse sickness



Microscopic view of Getah Virus