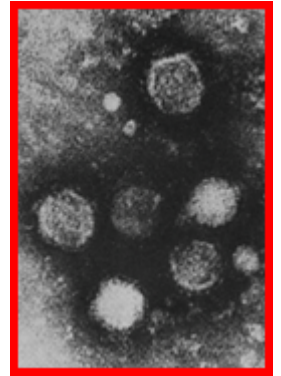


Powassan (POW)

Powassan (POW) is caused by a flavivirus. There are two virus types. One virus type is transmitted by the deer tick/blacklegged tick (*Ixodes scapularis*): lineage 2 POW virus (“deer tick virus”). The other virus type is transmitted by other *Ixodes* ticks – *Ixodes marxi* (squirrel tick), and *Ixodes cookei* (woodchuck tick–found E. of Rockies into New England & Canada): lineage 1 POW virus. The Rocky Mountain Wood tick (*Dermacentor andersoni*) and *Ixodes spinipalpus* can also transmit the virus.



Humans are “dead end” hosts (ticks can’t pick up disease from them).

Transmission time can be within minutes of the bite. Incubation period is 1 week to 1 month after a bite.

Symptoms include headache, fever, nausea, vomiting, stiff neck, and sleepiness, breathing distress, confusion, tremors, seizures, paralysis, and possible coma. Encephalitis and meningitis can occur – 10% of encephalitis cases result in death.

Survivors of POW: 50% have permanent neurologic problems – Headaches, muscle wasting, memory problems

Supportive treatment is the only available treatment.

Tests for POW: Serum or CSF to detect virus-specific IgM & neutralizing antibodies

“Powassan could become epidemic like Lyme disease. Because it can be a serious disease causing fatalities and there is no treatment for it, Powassan has the potential to become a greater of a public health threat than Lyme disease.” –

Professor Emeritus of Epidemiology at the Yale School of Public Health, Durland Fish, PhD.

Powassan Virus photo: Canad. Med Assn. J. 5-2-64

©LDA. 2018. 2014. 2015. This web site provides practical and useful information on the subject matters covered. It is distributed with the understanding that LDA is not engaged in rendering medical or other professional services. Seek professional services if necessary.