

AD 676344

TRANSLATION NO. 49

DATE: July 1968

DDC AVAILABILITY NOTICE

This document has been approved for public release and sale; its distribution is unlimited.

JUL 1968

DEPARTMENT OF THE ARMY
Fort Detrick
Frederick, Maryland

Reproduced by the
CLEARINGHOUSE
for Federal Scientific & Technical
Information Springfield Va 22151

Journal of Microbiology, Epidemiology & Immunobiology, USSR, ~~1943~~ 1-2, 1943 #49
C/1

To the epidemiology of Tick Spotted Fever of Central Siberia, by M. K. Krontovskaya
and M. D. Shtamikov. Pages 65-68

This is a report of the work of the VIEM in Central Siberia in regard to tick spotted fever. The studies cover the populated areas where the disease was noticed and also adjacent areas in a radius of 8-250 km.

Study of the history of the disease in 2 hospitals disclosed that this disease was present 3 years before we started our work and went under the diagnosis of grippe and typhus or an atypical typhus. Later doctors of these areas began calling it tick fever due to the presence of tick bites in anamnesis and objective analysis. The illness appeared 2-3 or 5-6 days after the noted bites.

Epidemiologically and clinically this disease does not compare with typhus fever.

Here was a disease with headaches appearing, sudden rise in temperature, with the presence of a hyperaemical infiltrate, painful and swollen regional lymphatic glands, with bradycardia, and the appearance of an extensive follicular-apuloid rash in the first days of illness. The infection terminated with a drop in temperature. The high temperature lasted, in mild cases 5-6 days and in severe cases 14-16 days. All this was reminiscent of typhus except the absence of lice in the nidus and the appearance of the disease always in the spring and summer months.

Study of the past cases of the disease disclosed that most of the cases appear in the spring and summer months, and that the infections start 1-3 days after the removal of the tick. That the disease basically affected those 20-50 years of age, and that mostly the masculine population contacted this disease lead us

49

to believe that this was because the work in this area was masculine and the men were nearer the source of infection; the tick.

Thus we studied the relation of the tick to this disease and it proved to be a worth while study. The study of 19 inhabited areas indicated the center of the infections, in the steppes, where from year to year the cases of the disease appear in increasing numbers. Epidemiological and parasitological studies and experiments established the tick *Dermacentor nuttalli* as the transmitter; it being the most prevalent and followed by the *Ixodes persulcatus* and *Dermacentor silvarum*.

Although prophylactics cannot stop the disease, measures can be applied which will lessen the chance of infection; burning the grass in early spring, chemical destruction of the rodent burrows, chemical treatment of the hay after the fall harvest, better care of livestock and self inspection and defense against ticks. Killing ticks after removal from the body is important as a half-hungry tick has a virulent reaction.