Characterization of high virulent strains of equine rhinopneumonitis virus

S. V. Alexeyenkova and K. P. Yurov
Federal Scientific Center VIEV, Russia
Equid herpesviruses

1 type – rhinopneumonitis-viral abortion
(several forms: rhinopneumonitis, abortion, neonatal mortality, myeloencephalopathy, uveitis and chorioretinitis).

2 type – laryngotracheitis, keratoconjunctivitis;
3 type – coital exanthema;
4 type – rhinopneumonitis;
5 type – laryngotracheitis, multinodular pulmonary fibrosis;
6, 7, 8, 9 types – pathogenic for other species: donkeys, zebras, kulans, antelopes, alpacas, llamas, gazelles.
Main results

- Local outbreaks of EHV-1 infection were traced to horses in Russia in 2018-2020.
- During outbreaks of equine diseases, we observed rhinopneumonitis, encephalomyelitis, abortion, and coital exanthema.
- All EHV-1 isolates lack the G2254 point mutation in the conserved sequence encoded by ORF30 and belong to the wild type A2254.
Encephalomyelitis

- It started with ataxia, muscle tremors, a sudden fall, and a short coma. The stallion was able to get up with the help of the groom but got into the wrong position. Trying to move he lost his balance and fell.
Abortion

- Aborted fetus
- Funisitis, chorionic vasculitis