

TRANSFER AND DETERIORATION RATE OF MATERNAL ANTIBODY AGAINST AHS

A study was conducted to determine the antibodies to the 9 known serotypes of African horse sickness virus (AHSV) in a group of 15 brood mares which had been regularly vaccinated with the MLV AHSV vaccine (currently widely used to control AHS in Southern Africa), and to measure the passive transfer and deterioration rate of maternal antibody to the individual virus serotypes in their foals.

Serum was collected from the 15 mares before foaling and from their foals after foaling and monthly thereafter for 6 months. Antibodies to each of the 9 AHSV serotypes were determined by serum neutralisation testing.

The findings were that there were varied antibody responses of the mares to the individual serotypes, with consistently higher responses to some virus serotypes. The antibodies passed from mare to foal also differed among serotypes, raising concern over the belief that foals receive maternal immunity and therefore only need to be vaccinated between 6 and 9 months of age.

This study will assist researchers in determining the effective utilisation of live-attenuated AHSV vaccines. Further studies will be required on a larger population to determine the optimal time for vaccinating foals.

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