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Dr. Lara K. Maxwell describes her project on Better Protection Against Equine Herpes (EHM) at Oklahoma State University

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Equine herpes virus type-1 (EHV-1) outbreaks are often not recognized until exposed horses are at immediate risk for developing equine herpes myeloencephalopathy (EHM). The objective of our study was to determine whether delayed therapy with the antiviral drugs valacyclovir or ganciclovir could protect those horses most at risk for EHM. Twenty-seven aged (> 20 years) mares were randomized to treatment: no therapy (control), oral valacyclovir therapy, or intravenous ganciclovir therapy. Body temperature was significantly lower in the ganciclovir-therapy horses as compared to control horses on days 6-8 PI ($P<0.05$), whereas the body temperature of valacyclovir-therapy horses did not differ from control horses. Viremia in peripheral blood mononuclear cells was also lower in the ganciclovir-therapy horses on days 7-10 PI and on day 10 PI in the valacyclovir-therapy horses. In whole blood, viremia was lower in ganciclovir-therapy horses from 7-10 days, but was not decreased in valacyclovir-therapy horses. Although antiviral drug administration did not reduce the risk of ataxia or nasal shedding, ganciclovir therapy did decrease the severity of ataxia as compared to valacyclovir-therapy and control horses.

In summary, ganciclovir administration provided better protection against EHM than did valacyclovir when therapy was initiated just prior to the onset of neurological disease.