Preclinical evaluation of a vaccine against herpes viruses
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Oral and genital herpes are caused by the herpes simplex virus type 1 (HSV-1) and the herpes simplex virus type 2 (HSV-2), which both cause lifelong infection. HSV-2 infection is associated with increased risk for HIV infection. HSV2-infected women pose a risk of transmitting this dangerous infection to newborn babies; therefore, avoiding herpes infection during pregnancy is very important.

In this issue of *JCI Insight*, researchers from the Albert Einstein College of Medicine report a promising vaccine strategy for immunizing against both HSV-1 and HSV-2 infections.

Led by Betsy Herold and William Jacobs Jr., the researchers expanded upon previous work from their group indicating that a vaccine made from an engineered HSV-2 virus that lacks expression of glycoprotein D could protect against infection with a single strain of HSV-2 in mice.

The current report shows that vaccination protects mice from multiple clinical isolates of HSV-1 and HSV-2 infection.

Mice rapidly cleared virus after infection and did not develop long-term latent infections. These studies provide exciting preclinical support for a new vaccine strategy to prevent infection by herpes viruses.

**More information:** Christopher D. Petro et al, HSV-2 ?gD elicits Fc?R-effector antibodies that protect against clinical isolates, *JCI Insight* (2016). DOI: 10.1172/jci.insight.88529

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