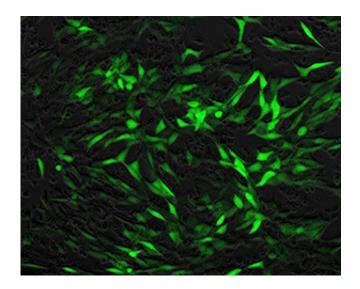


Two mood drugs combat virus implicated in birth defects

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Cells (green) infected by cytomegalovirus. Credit: Yale University

Two mood-stabilizing drugs provide protection against a potentially dangerous virus implicated in birth defects as well as disease in people with compromised immune systems, Yale School of Medicine researchers have found.

The related drugs, valnoctamide and valpromide, are approved for treatment of neurologic and psychiatric brain disorders such as epilepsy and <u>bipolar disorder</u>; both inhibit cytomegalovirus (CMV), one of the major causes of <u>birth defects</u> in infected fetuses, the researchers report Sept. 21 in the journal *Virology*.



"It is our hope that these existing drugs might ultimately help limit damage of fetal CMV infection, for which there is no treatment," said Anthony van den Pol, professor of neurosurgery at Yale and senior author of the paper.

Survival rates and overall health of mice infected with CMV improved dramatically when the drugs were administered, the researchers report. Also, the virus was inhibited in human cells infected with CMV.

Congenital CMV is the major infectious cause of birth defects and neurodevelopmental disabilities, including microcephaly, hearing loss, blindness, and mental retardation.

More information: Sara Ornaghi et al. Mood stabilizers inhibit cytomegalovirus infection, *Virology* (2016). DOI: 10.1016/j.virol.2016.09.012

Provided by Yale University

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