

## Sexually transmitted co-infections increase HIV risk: study

June 20 2011, by Chantall Van Raay

(Medical Xpress) -- Bacterial and viral sexually transmitted infections can exacerbate HIV replication in co- infected individuals, a team of Canadian researchers led by Charu Kaushic, associate professor of pathology and molecular medicine, has found.

"While sexually transmitted infections are associated with increased HIV-1 susceptibility and viral shedding in the genital tract, the mechanisms underlying this association are poorly understood," said Kaushic about the study that appears online this month in the <u>Journal of Infectious Diseases</u>. "Our research has found that normal response to these infections by the epithelial cells (the cells that line the genital tract) can lead to increased <u>HIV replication</u> in the <u>female reproductive tract</u>."

Through this study, Victor Ferreira, a graduate student in Kaushic's lab revealed how bacterial (gonorrhoea) and viral (genital herpes) sexually transmitted infections can increase HIV replication in co-infected individuals, opening new doors of understanding.

"Clinical studies have clearly shown that co-infection with herpes and gonorrhoea makes HIV infection worse and large trials have been conducted to study if controlling these infections can make <u>HIV</u> infection less invasive and less transmissible," says Kaushic, a member of McMaster's Institute for Infectious Disease Research.

"The benefit of treating co-infections has not been as impressive as was expected, and this study increases our understanding of why that might



be. We discovered that inflammation plays a key role in HIV replication. It's not necessary that if you control those infections, the inflammation is gone. So it might be useful, that in addition to treating these coinfections with antibiotics or antivirals, to control the inflammation and this might be more effective in stopping HIV replication rather than controlling just the infection."

## Provided by McMaster University

Citation: Sexually transmitted co-infections increase HIV risk: study (2011, June 20) retrieved 4 February 2023 from <a href="https://medicalxpress.com/news/2011-06-sexually-transmitted-co-infections-hiv.html">https://medicalxpress.com/news/2011-06-sexually-transmitted-co-infections-hiv.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.