

Hormonal Contraceptives and HIV Disease Progression

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There is a possible link between hormonal contraceptives and faster HIV disease progression, according to a research [review article](#) in the October 1 issue of *Clinical Infectious Diseases (CID)*. The authors caution, however, that more research is needed to either confirm or deny the connection.

Concerns about the impact of hormonal contraceptives on HIV disease began with studies of the monkey version of HIV, simian immunodeficiency virus (SIV). Researchers found that female monkeys treated with progesterone, a hormone used in contraceptives, were far more likely to become infected when exposed to SIV than monkeys not treated with progesterone, and that when they became infected they became sicker and died much more quickly.

A more recent study involving women in Mombasa, Kenya, found similar results to the SIV data. Women who received an injectible hormonal contraceptive were more likely to become infected with chlamydia and HIV than women who did not receive a hormonal contraceptive. Moreover, the women who received the hormonal contraceptive had a higher viral load after becoming infected and were more likely to die during an eight-year follow-up period. Two other studies, one in Africa and one in the United States, did not find any such associations.

The authors of the CID review article, Elizabeth Stringer, MD, and Erik Antonsen, from the Centre for Infectious Disease Research in Lusaka, Zambia, explain that biological mechanisms could potentially explain the increased risk of HIV transmission and disease progression among some women using hormonal contraceptives. For example, when blood levels of these female hormones are high, the immune system often responds differently to infection than when blood levels are lower.

While women taking antiretroviral (ARV) drugs would not likely be affected by higher estrogen and progesterone levels from hormonal contraceptives, the authors speculate, it is possible that women not taking ARV therapy may be.

Dr. Stringer and Antonsen recommend that additional research be conducted to either confirm or deny an association between hormonal contraceptive use and HIV transmission and disease progression.

