Routine screening for STIs urged

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As potent combination therapy for HIV (commonly called ART or HAART) has greatly improved health and life expectancy among HIV-positive people, more ART users are sexually active. Along with this increase in sex have come reports of increased rates of common sexually transmitted infections (STIs) such as syphilis, gonorrhea and Chlamydia, particularly among HIV-positive men who have sex with men (MSM) compared to HIV-negative MSM.

One possible reason for this difference is that more HIV-positive men are having sex with other HIV-positive men, a behaviour called serosorting. Specifically, these men are having unprotected anal intercourse. Although serosorting among HIV-positive men helps to reduce the spread of HIV, unprotected anal intercourse does not protect HIV-positive people from serious health threats, including the following:

- hepatitis B and C viruses (HBV and HCV) – Co-infection with these viruses may initially go unnoticed. Both HBV and HCV can cause accelerated liver damage in people who are HIV-positive.
- LGV (lymphogranuloma venereum) – This STI can damage the anus/rectum, damage internal organs and trigger the early onset of arthritis.
- syphilis – The germs that cause syphilis can quickly spread to the brain and also damage other vital organs.
- HPV (human papilloma virus) – Some strains of HPV can cause ano-genital warts and others can cause abnormal ano-genital growths that in some cases can transform into cancer.

In addition to directly harming affected people, STIs can make HIV-negative people more susceptible to HIV infection by causing sores, lesions or inflammation on or inside delicate tissues.

Although ART does help protect users from AIDS-related infections, it does not fully restore the immune system. As a result, perhaps the immune systems of some HIV-positive people may not resist STIs as well as they should.

Much research on STIs among HIV-positive people has been done at clinics that screen for and treat STIs. Perhaps this gives a skewed portrait of who has STIs. So a team of researchers in the Dutch cities of Amsterdam and Rotterdam performed a study with participants from clinics that provided general care for HIV-positive people. Researchers focused on MSM participants who were scheduled to make regular clinic visits and were not seeking help specifically for STIs. However, researchers found that high-risk behaviours were common and 16% of participants were subsequently diagnosed with an STI. This study underscores the value of regular STI screening for HIV-positive MSM.

Study details

Researchers recruited 616 HIV-positive men between October 2007 and June 2008. Participants completed an extensive questionnaire and had blood drawn, which was later tested for these specific STIs:

- hepatitis B
- hepatitis C
- syphilis

Swabs were taken of the anus and throat and, along with urine samples, tested for Chlamydia and gonorrhea.

Results
MSM who took part in the study tended to be older (46 years of age) than those who chose not to participate. Participants tended to be taking ART and had a suppressed viral load (less than 40 copies/ml) in the blood.

A total of 14% of MSM disclosed that they had symptoms suggestive of an STI. According to their medical records, blood tests done in the past six months found that about 3% had an STI, described by the researchers as “mostly rectal Chlamydia, urethral gonorrhea or syphilis.”

**Activities**

Common behaviours and other activities disclosed by participants were as follows:

- oral sex – 82%
- anal sex – 71%
- fingering – 56%
- rimming – 54%
- substance use during sex – 41%

The research team stated that “the use of sexual toys, the use of enemas before sex, and fisting were less often reported; that is, between 10% and 20% [engaged in these behaviours].”

According to the researchers, almost “10% of [participants reported anal bleeding in themselves or their sexual partners] during anal sex.”

**Claims of no sex yet infections found**

In total, 100 men (or 17% of participants) disclosed that they had had no sex in the past six months. Yet testing revealed that 10% of these men had STIs such as gonorrhea, syphilis or Chlamydia.

**Hepatitis B and C and syphilis**

About 14% of men did not have immunity to hepatitis B virus (HBV). Review of medical records suggested that most had been vaccinated against this virus but because their immune systems were weakened by HIV infection, they did not produce protective antibodies. This problem has been noted by doctors in other countries, including Canada.

Testing of men in the Dutch study revealed one case of new HBV and three cases of HCV infections.

About 33% of men in the study had syphilis in the past. New cases of syphilis were found in 35 men.

**Behaviours and risk**

Analysis found that the following factors were significantly linked to having an STI:

- being less than 40 years old
- having two or more partners in the past six months
- sharing sex toys with sexual partners
- having an enema before anal sex

**Sex toys and enemas**

Passing sex toys from one person to another without first cleaning or disinfecting them can cause germs to spread from one person to another.

Researchers found that enemas were associated with an increased risk of STIs, particularly in the anus. They stated that MSM who engaged in receptive anal sex “often take enemas before having sex for reasons of hygiene.” However, enema users are likely unaware that placing water in the anus/rectum inadvertently damages the lining of the rectum. This damage to the lining of the anus/rectum makes that part of the body more susceptible to subsequent infections during unprotected intercourse.

**Viral load and STIs**
Having a viral load in the blood of 150 copies/ml or greater was significantly associated with an STI being present. This is not surprising because STIs can cause inflammation and activate and inflame the immune system. However, this activation has the inadvertent effect of making cells of the immune system more susceptible to HIV infection. As more cells are infected during periods of heightened immune activation, such as during an STI, more HIV is produced and viral load goes up. After successful treatment for an STI, HIV viral load should subside among people who are taking ART.

**Screening for STIs**

In closing their report, the Dutch team encouraged doctors to conduct routine screening of their HIV-positive MSM patients for STIs. Moreover, they noted that such screening should not be restricted only to men who disclose that they are sexually active or who engage in high-risk behaviours. This is important because another research team in San Diego has also documented the presence of anal and rectal STIs among HIV-positive men who denied that they engaged in unprotected anal intercourse.

Screening and treating STIs improves personal health, stops STIs from spreading and may help reduce the transmission of HIV.

—Sean R. Hosein

**REFERENCES:**

Disclaimer

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