In the past several years, reports from London, England, indicate that rates of sexually transmitted infections (STIs), including gonorrhea, syphilis and HIV, are rising among men who have sex with men (MSM). The increase in these infections appears to be linked to a rise in high-risk sexual behaviours, including decreased use of condoms. Also, there appears to be an increase in the use and sharing of unsterilized equipment for substance use in some MSM in London. All of these high-risk practices play a role in the spread of several germs. In addition to the STIs mentioned above, hepatitis C virus (HCV) also appears to be spreading in some MSM.

Most studies about the ongoing outbreak of sexually transmitted HCV have focused on men who are co-infected with HIV. However, given the reports about the high-risk practices taking place in London (and likely other cities in high-income countries), it is likely that cases of sexually transmitted HCV are also occurring in some HIV-negative MSM. To investigate this possibility, researchers in London reviewed health-related information collected from HIV-negative patients who sought care at selected clinics in that city.

The researchers found 44 cases of acute HCV infection in HIV-negative MSM. These infections occurred between January 2010 and May 2014. The London researchers focused on behaviours and practices that placed the men at risk for HCV (and other infections). They also audited their clinic’s screening of MSM for HCV and found it less than ideal.

Focus on the men and their health

Key findings included the following:

- age – the men were between the ages of 24 and 75 years
- sex partners – 50% of the men had between one and two sexual partners, while the other 50% had between two and 100 sexual partners
- HCV viral load – the amount of HCV in the blood samples of the men was between 37 and 10 million IU/ml
- liver enzyme ALT – levels were generally elevated, suggesting liver injury
- strain or genotype of HCV – this information was available from 22 men; the most common strain was genotype 1 (including 1a and 1b), followed by genotypes 4 and 3
- the time between having a test for HCV and having an HIV test ranged between zero and 28 days

An absence of condoms

- The most common high-risk sexual behaviour occurred in 82% of men who disclosed that they engaged in both insertive and receptive anal intercourse without the use of condoms.
- 9% of men disclosed that they solely engaged in receptive anal intercourse without using condoms.
- 2% of men disclosed that they solely engaged in insertive anal intercourse without the use of condoms.
- No data were available for 7% of the men.

Sex and drugs

Other forms of high-risk sexual behaviour disclosed by the men included the following, each engaged in by one-third of the men:
• group sex
• fisting
• “chem sex” (having sex while high on street or party drugs)

About 50% of the men disclosed that they used street or party drugs from time to time. Common modes of self-administering these drugs included inhaling (33%) and injecting (20%).

**Partner’s infection status**

When participants were asked about their sex partners’ HCV and HIV status, here are some of the responses:

- nearly 33% did not know
- 7% were aware that their partners had HCV
- nearly 30% knew that their partners had HIV
- 14% knew that their partners had both HIV and HCV
- 20% thought that their partners did not have any viral infections

**Sexually transmitted infections**

Researchers found that 33% of men who were diagnosed with HCV also had STIs diagnosed at the same time, including the following:

- gonorrhea
- syphilis
- chlamydia
- both gonorrhea and chlamydia

**After diagnosis of HCV**

Researchers lost track of 11% of the men because they moved or stopped visiting the clinic. However, here is what happened to the rest of the men:

- 30% are being monitored
- 34% have immune systems that were able to clear HCV without treatment
- 25% have been treated for HCV

**Preventing HIV**

Condomless sex and sharing unsterilized equipment for substance use places people at high risk for becoming HIV positive. Researchers noted that 18% of the men had received combinations of anti-HIV drugs for short periods after they were potentially exposed to HIV. Using anti-HIV drugs in this way is called post-exposure prophylaxis (PEP).

Two men also received daily treatment with two anti-HIV drugs to protect them from becoming HIV positive. Using medicines in this way is called pre-exposure prophylaxis (PrEP). The men received these drugs because they were part of a clinical trial.

**Testing for HIV**

Of the 44 men who were HCV positive, 35 were screened for HIV and were negative. The remaining men were not screened for HIV.

**A look at the past—Screening for HCV**

The research undertaken by the London scientists motivated them to assess HCV screening practices at their clinic. To do this, they selected the month of November 2013 and examined the records for that month. At that time, 3,811 HIV-negative men sought screening for STIs. But only 15% were screened for HCV. Thus, much more needs to be done to offer comprehensive health services for MSM.
Key points

Based on their research, the London scientists made the following points:

- HIV-negative MSM remain at risk for HCV infection through high-risk behaviours involving sex and substance use.
- There are low rates of HCV screening for MSM at risk for becoming infected with this virus.
- Researchers are concerned that some MSM may not be aware that they have HCV, missing the opportunity to receive treatment for this virus and education about preventing its further spread.

For the future

The London study should be viewed as a good first step. It lays the foundation for further research into the health care needs of sexually active MSM. The researchers would like to conduct more detailed interviews with some men about how they engage with substances and sex. This work should result in a better understanding of the sexual and substance-using milieu of some MSM in 21st-century London. This knowledge can be used by health authorities, service providers and community stakeholders to create and deploy educational strategies for the prevention of HCV, HIV and other STIs. Along with this prevention education, barrier-free access to at least the following services needs to be considered to protect MSM and help them lead healthier lives:

- better screening for STIs, including HIV and HCV
- the provision of condoms, PEP and PrEP along with education about how to effectively use them as part of a package of tools to protect people from HIV
- screening for and treatment of addiction

Lastly, more research needs to be done to assess the extent of the spread of HCV among HIV-negative MSM not only in London but in other cities and countries.

Resource

CATIE’s Hepatitis C information

REFERENCES:


Disclaimer

Decisions about particular medical treatments should always be made in consultation with a qualified medical practitioner knowledgeable about HIV- and hepatitis C-related illness and the treatments in question.

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