

On the Radar



Reports of hepatitis C infection among HIV-positive men are raising the possibility that hepatitis C may pass during sex. What can you do to reduce the risk of transmission?

In

late 2002 on a trip to London, England, Gary found out he was infected with HIV. The then 47-year-old Montrealer was travelling frequently to the British capital for business and had been tested for HIV while seeking medical care there for another sexually transmitted infection. Back in Montreal, Gary found an HIV doctor and started antiretroviral therapy a few months later. As his doctor was monitoring Gary's response to treatment, he noticed an increase in the levels of liver enzymes in Gary's blood—a sign the liver was being damaged. A hepatitis C test came back positive.

Gary's case is not an isolated one. Reports of hepatitis C co-infection among HIV-positive gay and bisexual men (referred to as "poz" men in this article) have appeared in England as well as in other Western European countries, the United States and Australia since the beginning of the millennium. Researchers began to study these outbreaks of co-infection to determine why they were happening. When asked, the men in the outbreaks said they do not inject drugs—the most common way to pass hepatitis C.

These outbreaks of hepatitis C among poz men who deny injecting drugs have raised the possibility of sexual transmission of the virus. Researchers are now trying to understand more about the factors involved in sexual transmission and to determine who might be most at risk. In the meantime, advocates and co-infected men are urging their brothers (poz or otherwise) to get informed and make healthy choices.

NEW ROUTE OF TRANSMISSION

Hepatitis C is transmitted through blood-to-blood contact and is generally not thought to be passed easily during unprotected sex, at least according to the results of studies among monogamous heterosexual couples. The Canadian AIDS Society transmission guidelines rate the risk of passing hepatitis C through unprotected vaginal or anal sex as low.

The outbreaks among groups of poz men, which researchers surmise to be the result of unprotected sex, were therefore surprising. So researchers began to look for factors that might have made transmission more likely in these groups. One possibility is that some sex activities increase the risk of transmission. Another possibility is that having HIV makes people more vulnerable to hepatitis C infection. Both may be at play.

Researchers found that the kind of sex these men were having seemed to be a factor in the outbreaks. Poz men infected with hepatitis C talked about having unprotected anal sex, group sex and rough sex, including fisting. They also talked about using erectile dysfunction drugs, such as Viagra (sildenafil), and street drugs, such as crystal, ketamine, GHB or ecstasy, while having sex. Gary says that he

attended sex parties in London that involved group sex, unprotected sex, fisting and street drugs such as cocaine and ketamine.

It would be tempting to blame the outbreak on the (non-injection) drug use seen in these men, since sharing straws or bumpers to sniff drugs is a known way to pass hepatitis C. As well, since the outbreaks have occurred in poz men who engage in sex that involves multiple partners, drugs and rougher activities, talk among some circles has highlighted those men as being the only ones at risk.

"We shouldn't make the mistake that was sometimes made with HIV in the early 1980s. Back then, some men assumed that HIV was only something to worry about if you were one of those 'fast-lane' gays—had lots of sex, especially the rough kinds, and did drugs. We now know that you can get HIV from just one act of unprotected intercourse," says Sean Hosein, CATIE's science and medicine editor. "Some people are making the same assumption with hepatitis C. The hepatitis C virus can be spread via unprotected intercourse, particularly among HIV-positive men who have weak intestinal immunity. You don't have to be fisted to get it."

While this view may be up for debate, there is growing evidence to support it. Take the case of Doug, a 46-year-old poz man from British Columbia who was diagnosed with hepatitis C in 2007. He says that he definitely had unprotected group sex in the months leading up to his diagnosis, but he never sniffed or injected drugs. He assumes that he must have been infected through sex. He was devastated by the news, he says, because "I didn't

think you could get hepatitis C through unprotected sex. It wasn't even on my radar."

HEPATITIS C AND SEX

There are several factors that could increase the risk of transmitting hepatitis C during unprotected anal sex among HIV-positive men. As Hosein mentions, HIV infection weakens the immune system in the intestinal tract, which includes the anus and rectum. This could make it easier for poz men to be infected with hepatitis C through anal sex. While anti-HIV therapy suppresses HIV, allowing the immune system to regain some strength, it does not fully restore the immune system in the gut. Immune cell numbers may increase, but these cells are not as effective at fighting off germs as the cells in an HIV-negative person.

Having multiple partners increases the risk of transmission for all germs, including hepatitis C. Unprotected rough anal sex increases the risk of breaking the skin (or the fragile linings of the anus and rectum) or producing blood. Unlike the vagina, the anus (of a man or woman) does not produce lubrication when stimulated. Without lube, microscopic cuts can occur during unprotected anal sex, which

"I DIDN'T THINK YOU COULD GET HEPATITIS C THROUGH UNPROTECTED SEX. IT WASN'T EVEN ON MY RADAR."

increases the risk of transmission. Some street drugs dehydrate the membranes lining the anus and rectum, making them more prone to tearing. Street drugs can also impair judgment, leading people to take risks, and alter perception, so people don't feel the pain from the physical damage being done or they don't care.

Sexually transmitted infections (STIs) can create sores on the genitals as well as inside the genitals and anus—providing entry points for HIV and hepatitis C—and people often don't know they have these sores. In high-income countries like Canada, STI rates are very high in men who have sex with men (MSM) who have multiple partners. Finally, in co-infected men, detectable levels of both HIV and hepatitis C virus have been found in the semen, which means that transmission of hep C through semen is at least a possibility.

Many of these factors apply to more than just poz men — they also apply to HIV-negative MSM and, in some cases, anyone who has anal sex. This is leading some people concerned with larger public health issues to take a cautionary approach when it comes to thinking about how to reduce hep C transmission.

It is not yet clear the extent to which hepatitis C can be passed on during sex. In studying the outbreaks of hep C in other countries, researchers so far have not observed similar outbreaks among HIV-negative men, but this does not mean that HIV-negative men are not at risk. It is possible that HIV-negative men are not being tested as frequently for hepatitis C, so the cases are not being picked up. It's also possible that an outbreak has not yet occurred in that population.

WHAT ABOUT CANADA?

Has there been an outbreak of hepatitis C among poz men in Canada? There are no published reports and anecdotal evidence is not definitive. Dr. Patrice Junod of Clinique Quartier Latin in Montreal says he has not seen a dramatic spike in the number of cases of hepatitis C among poz gay men in his clinic, and he hears similar observations from his colleagues across the country. However, he adds, "I am testing for hepatitis C among my HIV-positive patients more often since we have learned of the outbreaks elsewhere."

According to Rob Gair of Vancouver's Health Initiative for Men (HIM), unpublished preliminary results from a 2008 study of MSM in Vancouver's West End neighbourhood found that about 5 percent have been infected with hepatitis C at some time. Looking at only HIV-positive MSM, the level of hepatitis C co-infection is much higher, about 18 percent. These numbers concern Gair, especially considering that a significant portion, 20 percent, of MSM with hepatitis C (both poz and HIV negative) in the survey said they do not inject drugs. If nothing else, poz gay men should be more aware of hep C and its potential to be passed on during sex.

While it seems that an outbreak has not yet occurred in Canada, this could change given the international networks among gay communities. There is evidence that the virus seen in outbreaks in different areas is genetically related, suggesting that men infected in one area travel to another where the virus is passed on, or, as in Gary's case, men travel to an area where hepatitis C infection is established, pick it up and then bring it home.

TREATMENT DOUBLE TROUBLE

Some poz men might think, "What's the big deal about getting another virus? I already have HIV." That attitude is easily understood, but being co-infected with HIV and hepatitis C brings on a whole new set of health challenges.


Hepatitis C damages the liver. It generally takes a couple of decades before severe damage develops, but if you already have HIV, the damage can occur much faster—up to three times faster, particularly if your CD4 cell counts are low or you are in generally weaker health. If you haven't already started taking antiretroviral therapy to treat your HIV, you most likely will one day, and you need your liver to be as healthy as possible to help you process the anti-HIV drugs.

The only way to know for sure whether you have hepatitis C is to have a blood test; there are often no symptoms during the initial infection. Harlon, 45, who was diagnosed with HIV in 1987, only learned of his hepatitis C infection in 2006. Similar to Gary's case, Harlon's doctor ordered a hepatitis C test when Harlon's liver enzyme levels came back abnormally high. But viral hepatitis infection does not always lead to elevated levels of liver enzymes in the blood. Harlon, from Mississauga, Ontario, has never injected

drugs and thinks he might have been infected with both viruses back in the late 1980s when he was having lots of sex—meaning he lived with hepatitis C for two decades without knowing it.

While there is treatment for hepatitis C, being co-infected makes treating this virus more difficult and lowers the chances of therapy being successful. (Successful treatment does not protect against being re-infected with hepatitis C.) Treatment worked for Gary and Harlon—their hepatitis viral loads went to undetectable and stayed there. Doug wasn't so lucky. Even after 15 months of treatment (the usual course of treatment is up to 12 months), he still had detectable hepatitis C virus in his blood. He's hoping that one of the new treatments in development might help him one day; until then, he's staying as healthy as he can.

Hepatitis C treatment involves daily pills of ribavirin and weekly injections of pegylated interferon. Side effects, including flu-like symptoms, anemia, irritability and depression, are known to be difficult. "Hep C treatment was an assault on my mind and body," says Harlon, who was particularly hard hit by treatment side effects. "Initially it took me four days to recover from the injection. I felt like I



**“HAVING HEP C
ADDS A WHOLE
NEW LAYER TO
THE STIGMA WE
FACE AS POZ
GAY MEN.”**

was hit by a truck. I was tired but I also had insomnia. I lost my appetite. I had psychological effects, too—seeing or hearing things that were not there, especially at night. I was paranoid to go out, as I felt that everyone could see how sick I was.” Harlon gained control of his treatment by managing his side effects one at a time, but he was very glad when treatment ended.

Gary, on the other hand, considers himself very lucky because he had relatively few side effects: “For the first four to six weeks, I was nauseated and tired after the weekly injection but then my body seemed to adjust and my energy came back. I did feel blue sometimes, but it was not nearly as bad as I had read about.”

Hepatitis C treatment is expensive, upwards of \$20,000, and finding financial support is not always easy. Not all private insurance plans cover hepatitis C treatment. Coverage by provincial prescription drug plans varies across the country and often requires that certain conditions be met. Check out www.hepcinfo.ca for comprehensive information on hepatitis C, including getting help with costs for treatment. See also “Double Duty,” an article about HIV/hepatitis C co-infection in the Spring 2008 *The Positive Side*.

SPREADING AWARENESS, NOT THE VIRUS

Co-infection is not only a burden when it comes to taking care of your health, it also has social and psychological effects. “Having hepatitis C adds a whole new layer to the stigma and discrimination we face as poz gay men,” Harlon says. Though hepatitis C is much more common than HIV in the general population, it has the reputation of being an infection of injection drug users. Canadian estimates from 2007 put the number of new cases of hepatitis C at almost 8,000, compared with 2,400 reported new cases of HIV the same year. Of those new hep C cases, the vast majority (83 percent) involved injection drug use. Many people assume that a person with hepatitis C is an injection drug user and then they pile on all their preconceived notions and prejudices. Harlon thinks it’s important for people to know that hepatitis C can be passed during sex so these old stereotypes can be broken down.

Stigma and discrimination from poz men can also be a problem for the co-infected. “People don’t know about hepatitis C—not the gay community, not even the broader community,” Harlon says. “Ignorance turns to fear, and fear can kill a hot time that’s developing. Guys have walked away from me when I told them I was co-infected.”

Many poz men have found a sense of community with their HIV-positive brothers. In the coffee shop that can mean sharing updates on CD4 counts and treatments; in the bedroom it can mean serosorting—having sex only with men of the same status. Not every poz man serosorts, but it’s not uncommon either. Serosorting among poz men can lead to barebacking (unprotected anal sex) because the men decide that the benefits of unprotected sex with another poz man outweigh the risks.

Throw a poz man co-infected with hepatitis C into the mix and things can get complicated. First, there is a risk of

the hepatitis C virus passing among poz men who bareback but aren’t aware that their partner may be co-infected. Second, a co-infected man runs the risk of being ostracized if he discloses his status, compounding his sense of isolation. Gair is also concerned that this could lead to a new level of serosorting, where poz men choose sex partners who are HIV positive and hepatitis C negative. The problem with serosorting for negative partners is that one can never be sure of the partner’s negative status. Poz men who serosort for hepatitis C and bareback may think they are safe but

GET HIP TO HEP C

What can a horny poz guy do to reduce his chances of getting or passing on hepatitis C? Since the virus is transmitted by blood (and potentially by semen), safer-sex messages about HIV also apply to hepatitis C.

- Use condoms for anal sex and latex or polyurethane gloves for fisting. Change them often, and change them every time you change partners—when you are the top and when you are the bottom.
- Don’t share sex toys. If you do, put a new condom on the toy every time it is used in someone different.
- Lube it up and use lots (water- or silicone-based, not oil-based if you’re using latex condoms or gloves). Make sure everyone has their own supply and they use it only on themselves.
- If you bareback, try to limit the number of partners you have sex with during one session.
- Take care of your hands, your ass, your dick and your mouth. Be aware of open cuts, hemorrhoids or red swollen spots anywhere—they can all increase the risk of passing on hepatitis C and HIV. Start out easy during fisting or rough sex to let sphincters dilate. Keep fingernails short and smooth with no sharp edges (that might tear a glove or the lining of the rectum). Don’t brush or floss your teeth for a couple of hours before the session.
- Check in with yourself before doing that extra bump of ketamine or line of crystal. Are things going OK? You might decide to wait a while before the next hit.
- Talk about it. This can be hard in a group situation, but if you and your partner(s) know that hepatitis C is in the equation, you can decide to dial it back and still have a good time.
- Keep yourself healthy, including getting tested regularly for sexually transmitted infections.

might actually be putting themselves more at risk of becoming infected with hep C.

How poz men are going to handle this new information isn’t clear yet. While Harlon feels compelled to inform others about his experience, Gary takes fewer risks nowadays but acknowledges that when the urge to party hits, it can be hard to play safe all the time. Gair says we need to raise awareness of the issue. Poz men know how to be healthy and horny—given the right information, they can prevent hepatitis C from becoming a serious issue in our communities. +