
Sexual Transmission of Hepatitis C Virus (HCV) among Gay, Bisexual and Other Men Who Have Sex with Men (GBMSM)

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Agenda

- Brief review of Hepatitis C (HCV)
- Is sexual transmission of HCV happening?
- Sexual transmission in perspective
- Factors involved
- Health challenges of co-infection
- Discussion

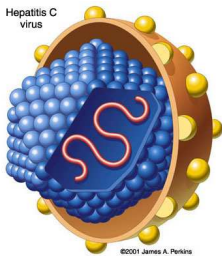


As we go along...

- What program implications would this research have for frontline healthcare or community workers?



The Hepatitis C Virus



www.thehealthnews.org

- Not A and not B
 - Causes liver damage
 - Acute vs. chronic stage
- No vaccine
 - Treatment is 50-80% effective
 - Spread through blood-to-blood contact, especially shared drug-use equipment



www.giantmicrobes.com

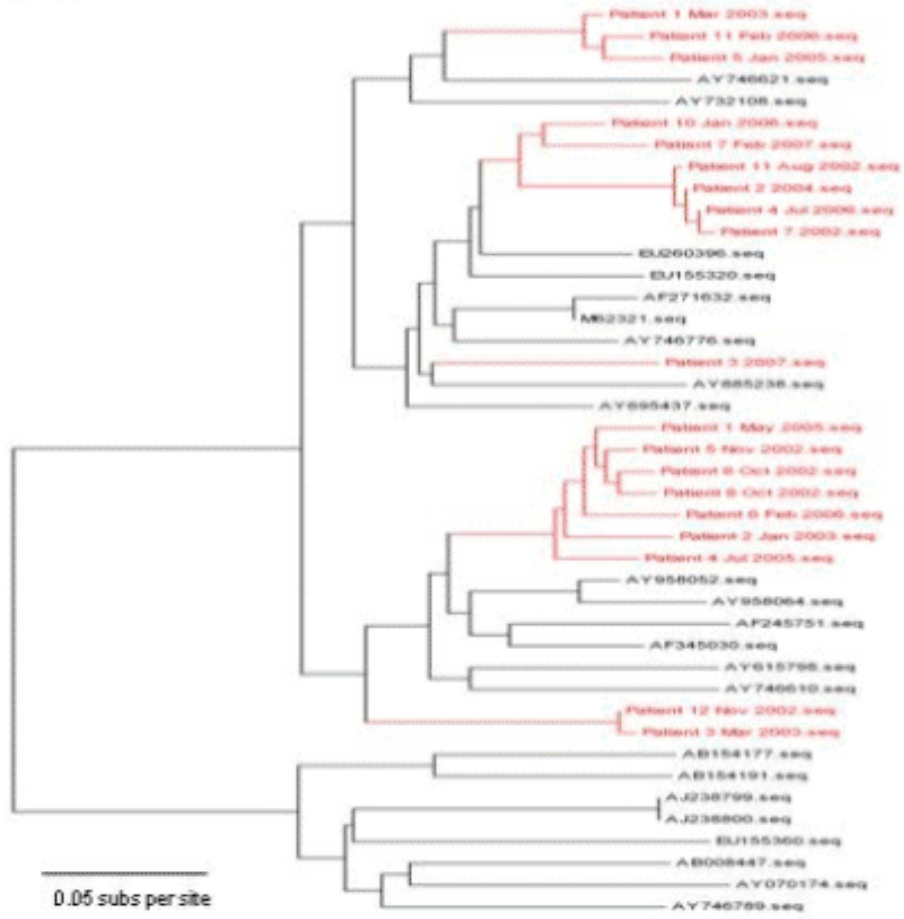


Is sexual transmission happening?

- Increasing reports of cases of hepatitis C in gay and bisexual men with HIV who report no injection-related risks since 2000
- Genetic analysis shows clusters of HCV that match these men's sexual networks



Genebank Samples (black)



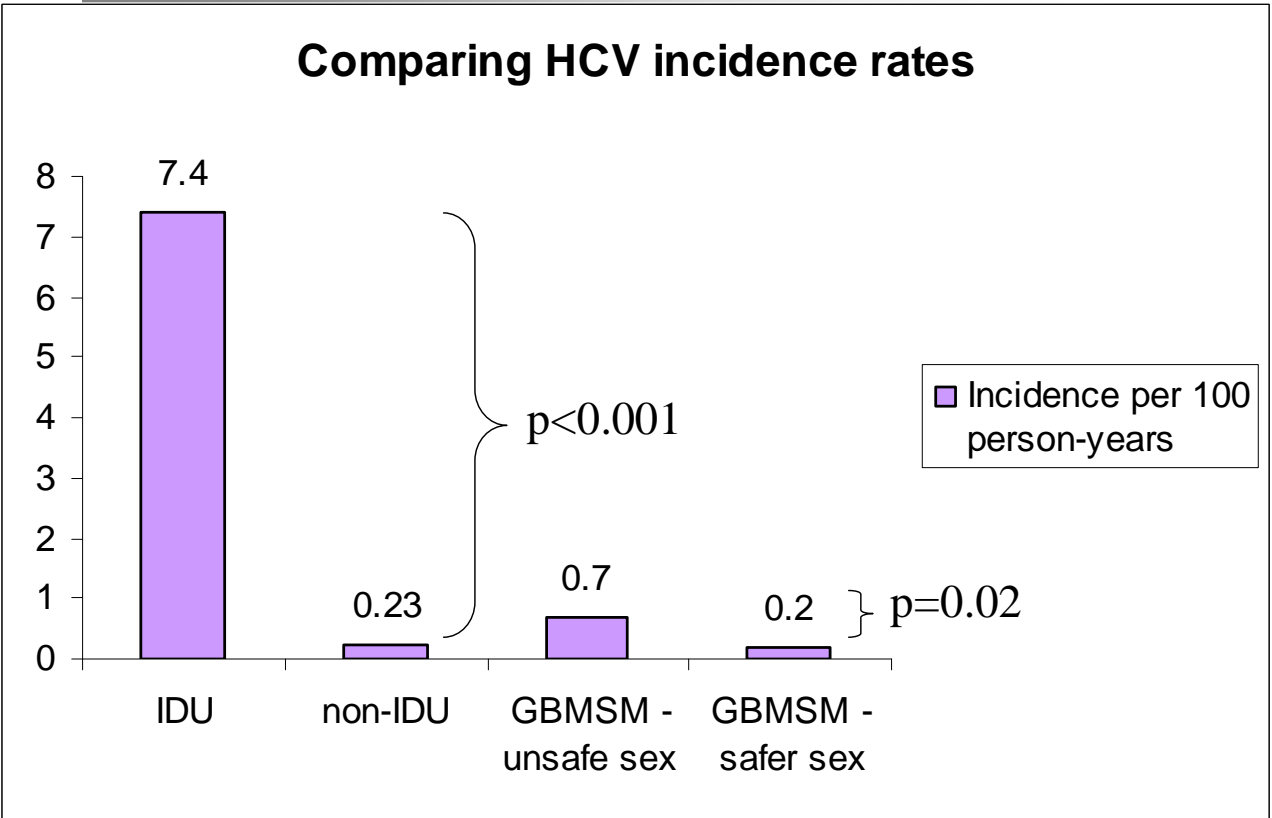
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Let's put it in perspective...

- At least 50% of hepatitis C cases are attributed risks associated with injection drug use
- Risks in Ontario, 2004:
 - 53% current/former IDU
 - 13% transfusion
 - 34% other



Let's put it in perspective...



What factors are involved?

- HIV infection
- STI infection
- sex practices that cause mucosal microtears or exposure to blood
- unprotected anal sex
- giving unprotected oral sex
- use of recreational drugs during sex
- multiple sex partners

- A note on HCV in semen



What factors are involved?

- Interconnected factors are a mix of direct risk, indirect risks or both:
- Unprotected sex ⇒ HCV exposure
- Unprotected sex ⇒ HIV/STI ⇒ ↑ susceptibility
- Drug use ⇒ prolonged sex ⇒ HCV exposure
- Drug use ⇒ mucosal drying ⇒ ↑ susceptibility
- Drug use ⇒ ↓ inhibitions ⇒ HCV exposure

Why now?

- Changes to HIV epidemic
- Changes to HIV's impact on the immune system and HCV in blood and body fluids
- Changes in sexual behaviour and risks
- Changes in screening of men with HIV who are accessing HIV healthcare



What about...

- ...HIV-negative men?
 - Likely a combination of less biological risk (re: HIV) and less regular screening
- ...women?
 - Risk factors of HCV transmission include drug use, sex work and STIs



Implications of Co-infection

- Disease Progression
 - HIV hastens HCV disease progression
- Spontaneous Clearance
 - HIV reduces a person's chance of spontaneous HCV clearance



Implications of Co-infection

- Treatment Complications
 - HIV lowers HCV treatment responses and can require longer treatment
 - HIV treatment can be hard on the liver
 - Liver damage reduces its ability to process HIV drugs
- A New Stigma
 - Hierarchical stigma of HCV and HIV



In other news...

- Syphilis has also been associated with liver damage – referred to as syphilitic hepatitis
- LGV outbreaks are occurring in gay men with HIV, and many of them also have HCV



Review

- Sexual transmission of HCV is occurring among gay men with HIV
- A number of factors are associated with this sexual transmission
- Research has not fully uncovered the mechanisms involved
- HIV/HCV co-infection presents significant (but not insurmountable) health challenges



Program Implications

- What program implications would this research have for frontline healthcare or community workers?



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