

Alcohol use among HIV/HCV co-infected patients: Implications for treatment

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Alcohol use among HIV/HCV co-infected patients

- Alcohol use is prevalent among HIV-infected persons
 - HCSUS found 8% of HIV-infected patients in care to report heavy drinkers
 - Primary care setting of HIV-infected patients found 19% to have problem drinking and additional 33% consumed mild to moderate amounts of alcohol
 - Cohort study of HIV-infected persons with a history of alcohol problems found 24% and 16% had moderate and at-risk drinking, respectively

Implications for treatment of the co-occurring conditions

- Perspective
 - Provider
 - Patient
- Differing priorities
 - HIV
 - HCV
 - Alcohol use

HIV-LIVE study: Longitudinal Interrelationships of Viruses and Ethanol

- Cohort study of 400 HIV-infected persons with current or past ETOH problems
- Half were HCV co-infected
- Followed for up to 5 years (median 3.3) from 2001-2006
- Biannual assessment of clinical, substance use, and health care use
- Support from NIAAA and PI is Jeffrey Samet, Boston University Schools of Medicine and Public Health

HIV-LIVE study

Highlight some key findings

1. HCV status and alcohol use
2. Depressive symptoms
3. Barriers to HCV treatment
4. Access to liver specialty care and the role of substance abuse treatment

Awareness of HCV diagnosis is associated with less alcohol use among persons co-infected with HIV. Tsui J et al. JGIM 2007 *in press*

BACKGROUND

- High prevalence of HCV among HIV-infected persons depending on risk group (30-88%)
- Recommendation that all patients are tested for HCV
- Alcohol and HIV associated with more rapid progression of HCV-related liver disease
- Recommendation to abstain or at least moderate alcohol use
- Unclear if testing for HCV and informing patients of their status impacts future alcohol use

Awareness of HCV diagnosis is associated with less alcohol use among persons co-infected with HIV. Tsui J et al. JGIM 2007 *in press*

Hypothesis: Patients who report being told they HCV are more likely to have reduced alcohol consumption compared to those who had not been told

Examined the association of:

- Awareness of HCV diagnosis
 - Has a doctor ever told you that you had hepatitis C?
- Two outcomes
 - Abstinence
 - Unhealthy drinking in past 30 days
 - >14 standard drinks/week or > 4 drinks at one time for men
 - >7 standard drinks/week or > 3 drinks at one time for women
- Adjusted for the following factors
 - Age, sex, race, homelessness, IDU, depressive symptoms and abnormal liver enzymes

Awareness of HCV diagnosis is associated with less alcohol use among persons co-infected with HIV. Tsui J et al. JGIM 2007 *in press*

- 211/400 (53%) reported being told by a MD that they had HCV
- Being told that they had HCV was positively associated with
 - Abstinence AOR=1.60; 95% CI 1.13-2.27
 - No unhealthy alcohol use AOR=1.46; 95% CI 1.01-2.11
- Other variables associated with Abstinence or No unhealthy alcohol use were:
 - Older age
 - Female sex
 - Not being homeless

Awareness of HCV diagnosis is associated with less alcohol use among persons co-infected with HIV. Tsui J et al. *JGIM* 2007 *in press*

■ Limitations

- Do not know if patients received advice about their drinking and changed behavior as a result of physician counselling
- Social desirability bias
- Residual confounding

■ Conclusion

- Among HIV-infected persons with current or past alcohol problems, reporting being told that they had HCV was associated with greater abstinence and less unhealthy drinking
- May reduce the likelihood of developing HCV-associated liver disease

Hepatitis C infection is associated with depressive symptoms in HIV-infected adults with alcohol problems. Libman H et al. Am J Gastroenterol 2006; 101:1804-10.

BACKGROUND

- Depression in HIV-infected patients is common and under-diagnosed
- Depressive symptoms are associated with poor medication adherence, HIV disease progression and HIV-related mortality
- Alcohol use is associated with depression and may exacerbate it
- Chronic HCV infection is associated with neurocognitive symptoms

Hepatitis C infection is associated with depressive symptoms in HIV-infected adults with alcohol problems.
Libman H et al. Am J Gastroenterol 2006; 101:1804-10.

Hypothesis: HCV infection is associated with more depressive symptoms among these HIV+ persons

Examined the association of:

- HCV infection
 - HCV Antibody + vs. -
 - HCV RNA + vs. -
- Depressive symptoms
 - CES-D as a continuous variable and with cut-off ≥ 23
- Adjusted for the following factors
 - Alcohol consumption (abstinent/moderate/heavy)
 - Gender, age, race
 - CD4, homelessness, drug dependence
 - Medical comorbidity

Hepatitis C infection is associated with depressive symptoms in HIV-infected adults with alcohol problems. Libman H et al. Am J Gastroenterol 2006; 101:1804-10.

- Mean CES-D scores higher in HCV + vs. -
 - 24.3 vs. 19.0, $p < 0.001$ (Unadjusted)
 - 24.0 vs. 19.0, $p < 0.001$ (Adjusted)
- HCV/HIV co-infected persons with history of alcohol problems have more depressive symptoms than those without HCV
- Differences unexplained by a variety of population characteristics
- HCV may have a direct effect on neuropsychiatric function

Barriers to treatment of Hepatitis C in HIV/HCV co-infected adults with alcohol problems. Nunes D et al. Alcohol Clin Exp Res 2006; 9: 1520-6.

BACKGROUND

- Alcohol use and HIV infection associated with accelerated HCV disease progression and reduced response rate to interferon therapy for HCV
- Only 30% of HIV/HCV patients are eligible for interferon because of ongoing drug and alcohol use, psychiatric disease, poor adherence to medical therapy or other medical contraindications
- Other barriers such as psychological and medical issues in persons with alcohol problems have not been well delineated

Barriers to treatment of Hepatitis C in HIV/HCV co-infected adults with alcohol problems. Nunes D et al. Alcohol Clin Exp Res 2006; 9: 1520-6.

- Baseline data from the HIV-LIVE cohort
- Classified the contraindications to interferon therapy according to consensus-based guidelines¹
 - Absolute
 - Current heavy alcohol use (last 30 days)
 - Recent injection drug use with needle sharing
 - CD4 count < 100 cells/mm³
 - Decompensated liver disease
 - Suicidal ideation in past 6 months
 - Relative
 - Current moderate alcohol use
 - Current injection drug use without needles sharing
 - CD4 count 100 - 199 cells/mm³
 - Significant depressive symptoms (CES-D > 16)
 - None

¹ Carlos Martin et al 2004 HIV Clin Trials

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Table 2

Prevalence of Contraindications to Hepatitis C Pharmacotherapy Among HIV-Coinfected Persons With Current or Past Alcohol Problems (*N* = 200)

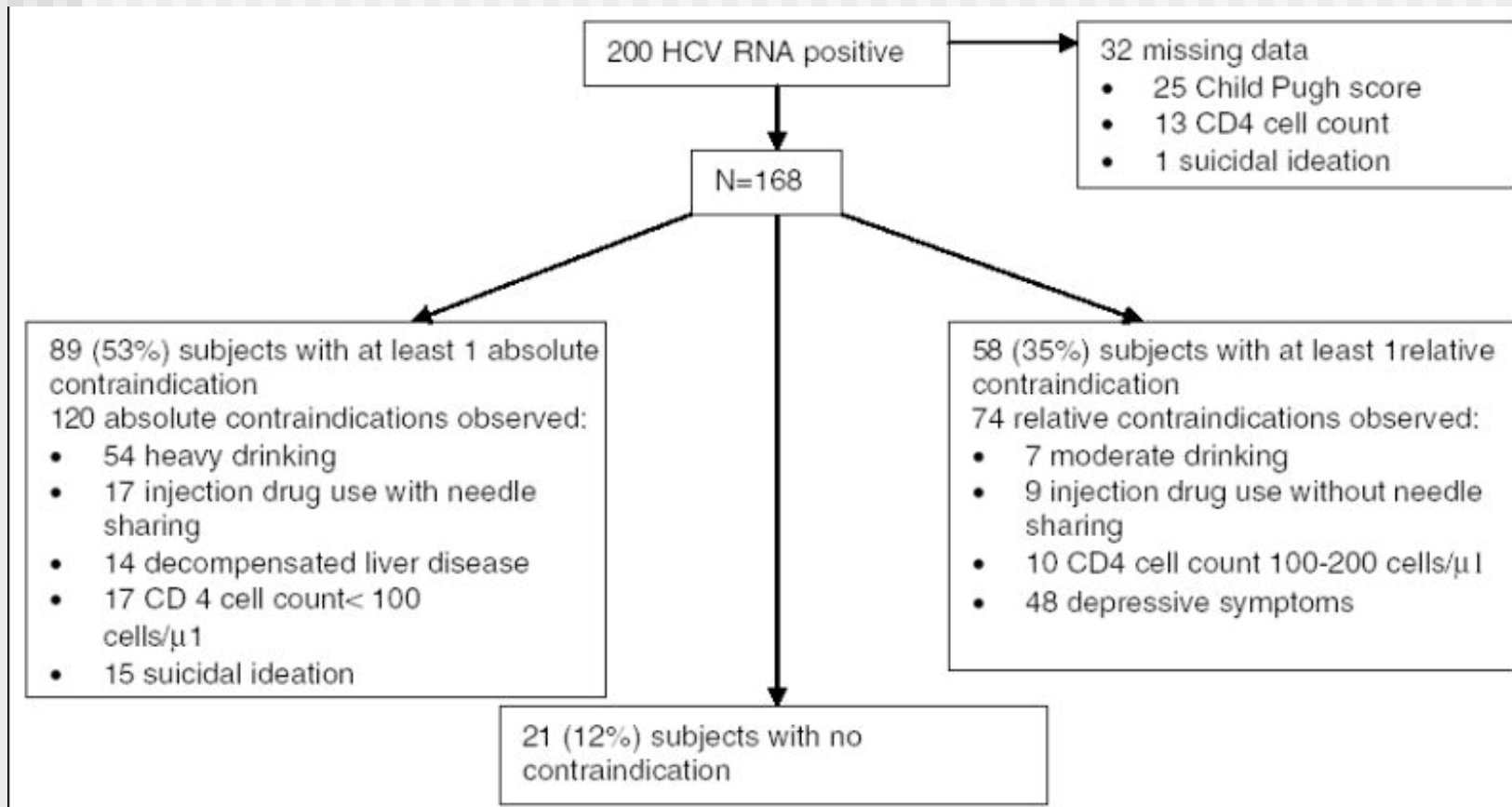
Characteristic	Number (% , 95% CI)
Absolute contraindication	
Current heavy alcohol use ^a	59 (29, 23–36%)
Injection drug use (past 6 mo) with needle sharing	21 (10, 6–15%)
Suicidal ideation [*]	19 (9, 5–13%)
CD4<100 [*]	18 (9, 5–13%)
Child–Pugh >7 [*]	14 (7, 3–11%)
Relative contraindication	
Moderate alcohol use ^b	16 (8, 4–12%)
Injection drug use (past 6 mo) with no needle sharing	26 (13, 8–18%)
Depressive symptoms (CES-D score > 16)	140 (70, 64–76%)
CD4 cell count 100–199 [*]	24 (12, 7–16%)

^a>14 standard drinks per week on average or >4 drinks in 1 day for men; >7 drinks per week or >3 drinks in a day for women.

^bAny alcohol use not meeting the criteria for heavy use.

^{*}32 subjects with missing data: 25 missing Child–Pugh score, 13 missing CD4 cell count, and 1 missing suicidal ideation.

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Barriers to treatment of Hepatitis C in HIV/HCV co-infected adults with alcohol problems. Nunes D et al. Alcohol Clin Exp Res 2006; 9: 1520-6.

- Factors associated with the presence of an absolute contraindication:
 - White race
 - Not being on HAART
 - Failure to seek routine medical care
 - < weekly attendance at AA
- No association found with age, gender, employment, receipt of substance abuse and mental health treatment

Barriers to treatment of Hepatitis C in HIV/HCV co-infected adults with alcohol problems. Nunes D et al. Alcohol Clin Exp Res 2006; 9: 1520-6.

- Majority (88%) had multiple contraindications
 - Continued alcohol and drug use
 - Depressive symptoms
- Contraindications present despite over 50% were in receipt of substance abuse and mental health treatment
- Urgent need for more intensive treatments for alcohol, drug and mental health issues to improve HCV treatment eligibility in these patients

Substance abuse treatment and receipt of liver specialty care among persons co-infected with HIV/HCV who have alcohol problems. Palepu A et al. JSAT 2006; 31: 411-17.

BACKGROUND

- 2002 NIH Consensus statement on HCV infection
 - Increase treatment availability to IDUs
 - Challenging to translate policy to practice
- Primary care providers may view patients in substance abuse treatment as having their addiction issues addressed and patients more likely to tolerate HCV therapy and monitoring
- Unclear if issues of HCV therapy are integrated into substance abuse treatment programs

Substance abuse treatment and receipt of liver specialty care among persons co-infected with HIV/HCV who have alcohol problems. Palepu A et al. JSAT 2006; 31: 411-17.

Hypothesis: Participation in SAT improves the likelihood of being evaluated by liver specialty care providers

Examined the association of:

- Substance abuse treatment
 - At least 12 weeks in a half-way house, residential facility, at least 12 visits to SA counselor or mental health professional, day treatment for at least 30 days, or in MMP
- Receipt of liver specialty care
 - “How many times did you see the following health care professional during the past 6 months?”
 - Affirmative response to being seen by a “liver doctor, hepatologist or specialist in treating Hepatitis C.”

Substance abuse treatment and receipt of liver specialty care among persons co-infected with HIV/HCV who have alcohol problems. Palepu A et al. JSAT 2006; 31: 411-17.

- SAT had a clinically important but not statistically significant association with receipt of liver specialty care
 - AOR 1.38; 95% CI 0.9-2.11
- Other variables
 - HAART AOR 2.18 (1.33-3.59)
 - CD4 cell count (100 cells) AOR 1.11 (1.02-1.20)
 - 30-d alcohol abstinence AOR 1.55 (1.04-2.32)

Substance abuse treatment and receipt of liver specialty care among persons co-infected with HIV/HCV who have alcohol problems. Palepu A et al. JSAT 2006; 31: 411-17.

- Substance abuse treatment systems
 - Attention to the need of patients to receive care for prevalent treatable diseases such as HIV/HCV co-infection
 - Facilitate medical care to improve quality of care
- Need for clinical care models
 - Coordination of primary health care with addiction and HCV specialty care
 - Ongoing support to engage and retain these patients with complex health needs

