PREDICTORS OF A SUSTAINED VIROLOGIC RESPONSE (SVR) IN HIV-HCV CO-INFECTED PATIENTS

Parmvir Parmar, BSc
Glen Howell, MA
Curtis Cooper, MD, FRCPC

PLAIN Language Statement

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Plain Language Statement

- Many people living with HIV also have hepatitis C (HCV) infection.
- We looked at interferon-based HCV antiviral treatment outcomes in HIV-HCV co-infected patients in the Ottawa area.

Plain Language Statement

- Results are not as good compared to HCV mono-infected people.
- Given the urgent need for better treatments, funding for new interferon-free HCV treatments (available in 2014) should not be delayed or restricted for those with HIV co-infection.

Background

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Background

- In Western countries, 30% of HCV infected persons are HIV co-infected owing to shared modes of transmission.

Background

- Co-infected patients experience:
  - increased morbidity and mortality
  - poor HCV treatment outcomes
  - increased on-therapy adverse events relative to HCV mono-infected patients

Background

- Primary Aim:
  - Compare HCV treatment outcomes (SVR rates) between HCV mono-infected and HIV-HCV co-infected patients followed at The Ottawa Hospital Viral Hepatitis Clinic.

Background

- Assessed:
  - Predictors of SVR
- Evaluated:
  - Adverse events experienced by patients on therapy
  - Patient reasons for prematurely interrupting therapy

Methods

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Methods

- A cohort database analysis was performed.
- Patients followed at The Ottawa Hospital (Ottawa, Canada) Viral Hepatitis Clinic between 2000 and August 2013.

Methods

- We assessed:
  - Demographic data
  - HCV risk factors
  - HCV treatment regimen
  - treatment duration
  - adverse reactions
  - HCV RNA results

Methods

- Baseline characteristic and outcomes in HCV mono-infected and HIV-HCV co-infected patients who started HCV treatment were compared.

Results

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Results

- 63 HIV-HCV co-infected
- 654 HCV mono-infected

Results

- Co-Infected and Mono-Infected did not differ :

- Mean Age: 50.9 vs. 52.3 years
- Mean HCV viral load: 5.85 vs. 5.87 log units
- Genotype 1 Infection: 61.9% vs. 62.5%
- Race : 84.1% vs. 79.8% White
- Fibrosis Stage: F0-2: 77.5% vs. 85.7%

Results

- HIV co-infected:
  - more often Male: 87.3% vs. 71.7%
  - Lower SVR: 38.2% vs. 54.3%, $p < 0.05$

Results

- Multivariate Logistic Regression
  - odds of achieving SVR were lower in HIV co-infection (OR = 0.36, p =0. 05), controlling for:
    - age (p = 0.002)
    - HCV viral load at treatment initiation (p = 0.04)
    - race, fibrosis stage, and genotype.

Results

- HIV co-infected patients interrupted therapy more often than mono-infected patients due to poor HCV viral response to treatment at
  - Week 12: 17.7% vs. 5.1%, $p<0.05$
  - Week 24: 19.4% vs. 8.7%, $p<0.05$

- The groups terminated treatment equally as often due to side effects, serious adverse events, and substance abuse issues.

Conclusion

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Conclusion

- Despite similar characteristics, HIV-HCV co-infected patients achieve lower SVR rates on interferon-based HCV treatments.
- This population is in great need of the more effective interferon-free HCV treatments that will become available in 2014.
- HCV antiviral funding should not be delayed or restricted for people living with HIV.

Acknowledgements

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