

HEPATITIS C TREATMENT OUTCOMES IN FIRST NATIONS CANADIANS

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PLAIN Language Statement

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Plain Language Statement

- Hepatitis C (HCV) infection rates are higher in First Nations(FN) Canadians compared to the general population.
- FN face barriers to care and treatment.

Plain Language Statement

- The Ottawa Hospital and Regional Hepatitis Program attempts to engage this vulnerable population in care and treatment utilizing a multidisciplinary model of care.
- We describe FN treatment outcomes which are similar to non-FN patients.

Background

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Background

- FN Canadians are disproportionately infected with HCV owing to higher rates of:
 - injection drug use (IDU)
 - cocaine use
 - tattooing
 - high-risk sex
 - incarceration

Background

- Despite a decreased progression to chronic infection reported in some FN populations, HCV-related mortality remains higher than in non-FN cohorts.

Background

- FN remain underrepresented in treatment programs.
- Barriers to HCV treatment include higher rates of diabetes, substance use and concurrent liver disease.
- Few studies have assessed HCV antiviral treatment success rates in FN.
 - **Cooper CL**, Bailey R, Bain V, Anderson F, Yoshida E, Kraiden M, Marotta P. Outcomes of peginterferon alpha-2a and ribavirin hepatitis C therapy in Aboriginal Canadians. *Can J Gastroenterol*. 2008;22(8):677-680

Background

- We compared HCV treatment outcomes, specifically sustained virologic response (SVR) rates, between FN and non-FN patients in our clinic.
- Adverse events experienced by patients on therapy and reasons for prematurely interrupting therapy were evaluated.

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 characteristics and outcomes were compared between FN and non-FN patients who were HCV RNA+ and started interferon-based HCV antiviral treatment.

Results

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Results

- 21 FN and 696 non-FN HCV-infected patients were included in the analyses.

Results

- FN and non-FN patients did not differ in:
 - Mean Age (51.1 vs. 52.2 years)
 - Sex (66.7% vs. 73.3% male)
 - HIV co-infection (9.5% vs. 8.8%)
 - HCV viral load at treatment initiation (5.66 vs. 5.87 log units)
 - Genotype 1 Infection (38.1% vs. 37.6%)
 - Fibrosis Stage (75.0% vs. 85.4% F0-2)
 - SVR rate (53.3% vs. 52.9%), $p > 0.10$.

Results

- Multivariate logistic regression :
 - FN status was not related to SVR ($p = 0.74$)
 - Lower odds of SVR were predicted by
 - age
 - HCV viral load at treatment initiation
 - HIV co-infection

Results

- FN patients interrupted therapy more often than non-FN due to
 - lost-to-follow-up (26.3% vs. 4.5%)
 - serious adverse events (4.8% vs. 0.6%), $p < 0.05$.

Conclusion

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Conclusion

- FN and non-FN Canadians can achieve similar HCV antiviral treatment outcomes under multidisciplinary care.
- No apparent differences in tolerance or side effect profile
- Multidisciplinary programs facilitate treatment initiation, completion and success in marginalized populations

acknowledgements

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