**Active intravenous drug use during chronic hepatitis C therapy does not reduce sustained virological response rates in adherent patients**

Philip Bruggmann, Luis Falcato, Beat Helbling, Olivia Keiser, Francesco Negro, Daniel Meili

on behalf of the Swiss Hepatitis C Cohort Study

1 ARUD Zurich (Association for risk reduction in use of drugs), Switzerland; www.arud-zh.ch
2 Department of Gastroenterology and Hepatology, Stadtspital Weil, Zurich, Switzerland
3 SCCS Cohort Centre, University Hospital CHUV, Lausanne
4 Services de Gastroentérologie et d'Hépatologie et de Pathologie Clinique, Hôpitaux Universitaires, Geneva, Switzerland

Background and objectives

Reluctance has been expressed about treating hepatitis C (HCV) in active IV drug users in both guidelines and clinical practice. IV drug users make up the largest risk group in HCV patients. They are destined to be the largest group of patients with end stage liver disease causing a major financial burden on the healthcare system. The literature affords no evidence for a general exclusion of this high risk group. The aim of this study was to evaluate the direct influence of active IV drug use on the efficacy of HCV treatment.

Methods

In this retrospective study in patients of the Swiss Hepatitis C Cohort Study (SCCS) data of 2535 patients were analysed. To study the direct influence of IV drug use on treatment outcome we selected only patients adherent enough to have their serum HCV RNA tested 6 months after the end of treatment and to attend at least one cohort follow-up visit during HCV therapy, documenting the drug use status. Type of anti HCV medication and the cumulative dose of interferon and ribavirin were assessed for all patients.

Patients with self-reported IV drug use in one or more of the follow-up visits during the above-defined period of interest were assigned to the IDU group. The aim of this study was to evaluate the direct influence of active IV drug use during therapy on the efficacy of HCV treatment.

500 patients fulfilled the inclusion criteria, 199 were IDU and 301 controls. The proportion of patients with a sufficient antiviral drug exposure (80% of the scheduled cumulative dose) and treatment duration (>80% of the scheduled duration) was comparable in the two groups: 66% of the patients with active IV drug use during therapy and 60.5% in control group.

The SVR rate was 69.3% in the IDU group and 59.8% in the control group. Treatment outcome results stratified for genotype are presented in Fig.2.

The multiple logistic regression analysis showed that the only independent predictors of SVR were HCV genotype and age whereas active IV drug use during therapy did not have a significant influence on treatment outcome.

Results

500 patients fulfilled the inclusion criteria, 199 were IDU and 301 controls. The proportion of patients with a sufficient antiviral drug exposure (80% of the scheduled cumulative dose) and treatment duration (>80% of the scheduled duration) was comparable in the two groups: 66% of the patients with active IV drug use during therapy and 60.5% in control group.

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Discussion

From the SCCS as a multicenter cohort with an observational period over almost 6 years we were able to obtain treatment data from 199 IDU, which is a high number compared to similar previous studies.

Main limiting factor of our study is its retrospective character. It was not possible to further differentiate IV drug use because this data was not raised in the cohort. As active IV drug use without any further differentiation is an exclusion criterion in many guidelines and for many practitioners, the statement of this study has still an important value.

**Conclusion**

Intravenous drug use per se does not affect treatment outcome or treatment quality in adherent patients.

**Corresponding address**

Philip Bruggmann, MD
ARUD Zürich
Sihihallenstrasse 30
8026 Zürich
Switzerland
p.bruggmann@arud-zh.ch

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