Abstract

Backgrounds: Intravenous drug use represents the main route of transmission of hepatitis C virus infection (HCV). IVDU represent approximately 75–100% of newly diagnosed cases of HCV. IVDU have traditionally been considered as difficult-to-treat, owing to a low treatment adherence. The presumed low adherence to care in IVDU represent nowadays the barrier to therapy with direct-acting antivirals (DAA).

Aims: The aim of the thesis was to assess efficacy of therapy of HCV with DAA and adherence to therapy in patients with history of IVDU. Comparing the results with the group of patients without IVDU, we would support the fact that the treatment efficacy in the IVDU group is high and that the utilisation of financial resources is effective.

Methods: All consecutive patients who started DAA anti-HCV therapy at the Department of Hepatogastroenterology of Institute for Clinical and Experimental Medicine from 1^{st} January 2017 to 6^{th} August 2018 were included. The patients were divided into two groups: individuals with history of IVDU (IVDU, N = 101) and control group (Controls, N = 177), without IVDU in the past. The patients' data were obtained from patients medical charts during treatment and follow-up.

Results: IVDU group achieved an SVR12 of 98% (vs. 98% in controls, N. S.). Two IVDU patients who were assessed as treatment failures were lost to follow-up. SVR24 was achieved by 88.1% of IVDU patients (92.1% in controls, N. S.).

All but one patient finished on time the presumed treatment period. Two percent of patients in IVDU postponed the end of treatment, 4 % in the control group (N. S.) The patients in IVDU group had a significantly higher number of postponed treatment visits (28.7 % vs. 4 %), postponing the appointment did not lead to lack of medication and omission of drug dose (1 patient in IVDU group, 2 patients in control group, N. S.). **Conclusions:** The treatment efficacy in IVDU group was excellent and comparable with treatment efficacy in control group. Adherence to therapy was worse in IVDU group when considering adherence to appointment dates, adherence to medication use was comparable. In IVDU group, no factors leading to decreased treatment efficacy were identified.

Key words: hepatitis C, therapy, direct-acting antivials, people who inject drugs