

C The Impact of Direct-Acting Antiviral Agents on Cytomegalovirus Reactivation in Chronic Hepatitis C Infection

أثر الادويه ذات التأثير المباشر المضاد للفيروسات (DAAs) على إعادة تنشيط الفيروس المضخم للخلايا (CMV) في عدوى التهاب الكبد الفيروسي سي المزمن (HCV)

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Abstract

Objective: The co-infection of HCV/CMV may accelerate the progression of liver diseases and worsen responsiveness to IFN treatment. The Direct-acting antiviral agents (DAAs), currently approved therapy for HCV, may cause a transient change in immune status, favoring the reactivation of other viruses. The current study aims to evaluate the impact of DAAs treatment on the reactivation of latent CMV in HCV patients. Methods: The serological IgG, IgM Abs against CMV were detected by ELISA on 192 HCV patients. The seronegative CMV IgM patients received (sofosbuvir/daclatasvir) regimen, then the CMV reactivation was examined by measuring the CMV IgM by ELISA and CMV DNA by real-time PCR. Results: The serological data revealed that all patients were positive for CMV IgG (100%) while (64%) patients were positive for CMV IgM. The seronegative CMV IgM (36%) received the DAAs protocol. The sustained virological response was monitored by measuring the HCV RNA viremia in the patient sera. The serological data revealed that 28.6% of patients had a reactivation of CMV, while 18.5% of patients had detectable CMV DNA viremia. Moreover, there was a significant improvement in liver function as well as a decrease in FIB-4 and APRI scores at EOT. SVR was reached 97.4% among the total studied patients (N= 192). Conclusion: CMV co-infection has no impact on the response rate to DAAs. However, the CMV reactivation might have occurred after the complete eradication of HCV by DAAs.