بسم الله الرحمن الرحيم

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تم رفع هذه الرسالة بواسطة / سلوي محمود عقل

بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

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Effect of Host Factors on Hepatitis C Treatment by Sofosbuvir Drug

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Declaration

This thesis has not been submitted for a degree at this or any other university

Hiam Rushdy A. Salem

Dedication

To my father, my mother, my husband, my brother, my sisters

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My special friends

For their love, encouragement, help and prayers that made studies possible and to them I owe everything.

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At first and foremost thanks to "Allah" the most merciful who gave me the power to finish this work.

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Effect of Host Factors on Hepatitis C Treatment by Sofosbuvir Drug

Abstract

Background: Hepatitis C virus (HCV) infection affects almost 180 million people around the world. HCV infection is one of the worldwide chief causes of chronic liver illness ranging from least histological changes to broad fibrosis and cirrhosis with the possibility of hepatocellular carcinoma (HCC). Egypt is considered to have the highest prevalence worldwide with an expected 14.7% of the total population seropositive for HCV. Even though the development of direct-acting antivirals (DAAs) has significantly improved the treatment responses to HCV infection. Treatment with pegylated-interferon-α (PEG-IFN-α) in combination with ribavirin (RBV) is considered the standard of care for chronic HCV infection treatment in countries with limited medical resources.

Aim: This study aimed to assess the clinical effectiveness and predictors of response to SOF-based regimens, either dual therapy, with SOF/RBV for 6 months or triple therapy with SOF/RBV/PEG-IFN-α for 3 months, and to

assess *IL28B* polymorphism SNP (rs12979860) as a predictor of response in Egyptian chronic HCV infected patients.

Subjects: In the period from 2015 to 2016, patients (n=165) who were eligible for treatment were classified according to their eligibility for interferon therapy: Group 1 (n=106) (interferon eligible) were treated with triple therapy for 12 weeks and Group 2 (n=59) (interferon ineligible) were treated with dual therapy for 24 weeks.

Results: As regard treatment response in the current study, the highest SVR rates were achieved with the Triple group (SOF/RBV/PEG-IFN-α), which was reached 93.4% although, the Dual group (SOF/RBV) showed SVR rates of 79.66%. The non-SVR rates recorded with SOF/RBV and SOF/RBV/PEG-IFN-α regimens were 20.34% and 6.6%, respectively. On analyzing the baseline parameters of patients who failed to treatment (Non-SVR), it was clear that those patients had significantly lower TSH; or higher TNF-α and PDGF. Also, it was found that a number of 106 patients (78.5%) had cleared HCV RNA thus achieved RVR after 4 weeks of treatment. The rate of RVR was non-significantly better in the Triple group (82.8%) *vs*. (70.8%) in the Dual treated group. By analyzing results in this current study, it was found that patients, who achieved RVR, showed a significant