Therapeutic trial to assess the efficacy and safety of folic acid and/or vitamin B complex on hepatitis C infected patients treated with pegylated interferon and Ribavirin

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Background & Aims: Pegylated-interferon α-2a and ribavirin (PIFN/RBV), the current standard treatment for hepatitis C virus (HCV) infection in Egypt is frequently associated with hematological adverse effects, leading to high treatment discontinuation rates. The objective of the present study is to explore the effectiveness of intervening with folic acid (F) and/or vitamin B complex (B) compared with placebo (C) in HCV treatment Egyptian patients for the management of treatment induced deterioration of health related quality of life (HRQOL) as well as hematological parameter.

Methods: In a randomized controlled trial, one hundred and sixty subjects were randomly assigned to receive PIFN/RBV in addition to BF, B, F or C. Blood samples were collected at different time points during 48 weeks and at 12 and 24 weeks post treatment for complete blood count and for HCV RNA real time PCR. Short form SF 36V2 questionnaire were used to assess HRQOL at various time during and post treatment.

Results: Egyptian HCV patients treated with PIFN/RBV showed deterioration of HRQOL which were correlated with deterioration in the measured hematological parameter. Supplementation with vitamin B complex plus folic acid significantly (P<0.001) decreased the deterioration observed in physical and mental health as well as complete blood count. Supplementation with either vitamin B complex or folic acid were also effective but with lower potency than their combination.

Conclusion: BF supplementation can reduce adverse effects of PIFN/RBV therapy in chronic hepatitis C patients, which may improve patients' HRQOL and their adherence to combination antiviral therapy.

Biography
Nermeen Nabil Ashoush has completed her PhD in 2015 from Ain Shams University in the field of Clinical Pharmacy and Pharmacy Practice. She has also completed a Diploma in Health Economics and Outcome Research from the University of Washington in 2015. She is working as a Lecturer in Clinical Pharmacy and Pharmacy Practice Department, Faculty of Pharmacy, The British University in Egypt. She is the Head of the Health Economics Unit, Center for Drug Research and Development, The British University in Egypt.

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