

INTRODUCTION

Hepatitis C virus infection is a serious worldwide problem . It has been estimated that there are over 170 million HCV infection world wide , with an increasing incidence of new infections (3-4 million every year) (*WHO,2007*).

In Egypt, the estimated adjusted national prevalence rate of chronic hepatitis C infection is 7.8% or 5.3 million people in 2004 (*Mohamed , 2004*).

Only one third of these individuals (1.75 million) are estimated to have chronic liver disease (elevated ALT) and, furthermore, among these one third (577,000 people) are suffering from advanced liver disease (*Wakil and Merezban ,2006*).

The current optimal therapy for patients with chronic hepatitis C virus (HCV) infection is the combination of peginterferon and ribavirin. Data from 2 large, randomized, controlled trials have shown that peginterferon alfa-2a or peginterferon alfa-2b when combined with ribavirin achieved sustained virologic response (SVR) rates that were significantly greater than that achieved with standard interferon and ribavirin (*Manns et al., 2001 & Fried et al., 2002*).

Side effects of treatment, however, are essentially universal.

Absolute neutrophil and lymphocyte counts typically decrease by 30% to 50% of baseline during therapy with the doses of interferon required to treat hepatitis C (*Wong et al., 1996*).

Also Combination therapy with ribavirin plus pegylated interferon is associated with an average Hb decline of 2–3 g/dL over the first 4 weeks of therapy (*De Franchesci et al., 2000*).

These Side effects led to modification of the dosage of peginterferon and/or ribavirin in 35-42% of patients treated with pegylated interferon in large, randomized clinical trials and discontinuation of therapy in 14-19% of these patients (*Manns et al., 2001 & Fried et al., 2002*).

Reducing the dose of peginterferon and ribavirin or discontinuing therapy before the planned course of therapy is complete has been associated with a reduction in SVR (*Davis et al., 2003 & Shiffman et al., 2004*).