SUMMARY

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) .

In Egypt, Hepatitis C virus prevalence rate in the general population was estimated to be between 10% and 15% in rural areas. Incidence rate was estimated at 2-6 per 1,000 per year, a level that will maintain prevalence rate of 5-15% for the foreseeable future. Approximately 5-7 million Egyptians carry antibodies for HCV and 3.3 million are chronically infected with HBV .

The current optimal therapy for patients with chronic hepatitis C virus (HCV) infection is the combination of peginterferon and Ribavirin, however, there are many side effects of treatment.

In this present study we studied the hematological side effects and its impact on response.

The study was conducted on 1080 HCV infected patients in Shebein EL Kom teaching hospital, hepatology department.

The patients were randomized in two groups:
Group 1: 536 patients received Peg interferon alfa-2a (180 mg subcutaneous once weekly) plus Ribavirin in recommended doses.
Group 2: 544 patients received Peg interferon alfa-2b (1.5 mg per kg BW subcutaneous once weekly) plus Ribavirin in recommended doses.

Anemia (HB<12 mg /dl) had occurred in about 52.2% of patients and led to modification of Ribavirin dose in about 15.7% of them when moderate anemia (HB<10 mg /dl) occurred and discontinuation of dose in about 9.1% of those patients when severe anemia (HB<8.5 mg /dl) occurred.

Neutropenia (ANC<1500 /ml) had occurred in about 45.6% of the patients, moderate neutropenia (ANC<750 /ml) occurred in about 19.8% of those patients and had led to modification of interferon dose while severe neutropenia (ANC<500 /ml) occurred in about 4.7 % of them and had led to discontinuation of interferon dose.

Thrombocytopenia (platelets<150000 /ml) had occurred in about 40.7% of patients about 3.6% of them had a moderate thrombocytopenia (platelets<50000 /ml) and modification of interferon dose had took place and about 1.3% of them had a severe thrombocytopenia (platelets<25000 /ml) and discontinuation of interferon dose had occurred.

Modification of Ribavirin dose was associated with decrease in response all over the weeks of therapy and it appeared more profound

when this modification led to Ribavirin dose to fall below 70% of recommended dose or when this modification had occurred in the first 24 weeks even to lesser extent.

Adherence to interferon dose was so crucial in achieving different type of response especially in the first 24 weeks and when the dose was maintained above 70% of recommended dose, as in the present study no one who received less than 70% of recommended interferon dose can achieved SVR.