Summary

Chronic hapatits C is a major medical issue because it is a world wide progressive preventable and treatable disease with a lot of major complications and problems of the disease and therapy ,HCV is a global health problem approximately 3% of word population, Egypt has the highest HCV prevalence in word 10-20% of general population are infected , the transmission of HCV is primarily through exposure to infected blood.

Chronic hepatitis C infection can cause cirrhosis, liver failure, HCC and extra hepatic manifestation like hematological disorder ,autoimmune disorder, diabetes mellitus, renal disease, ocular disease , dermatolological disease and musculoskeletal disease.

Diagnosis of chronic HCV infection by full history taking, general and local abdominal examination and investigation by biochemical assessment of liver function included (serum aminotransferase enzymes, serum albumin, serum bilirubin, prothrombin time), virological assay for HCV included(enzyme immunoassay, RIBA and PCR for HCV RNA),liver biopsy for histological grading and fibrosis stages and recently fibroscan for evaluation of liver stiffness measurement.

The currant standard treatment of HCV is the combination of pegylated interferon (IFN) alfa and ribavirin. The efficacy endpoint of hepatitis C treatment is the "sustained virological response" (SVR), defined by the absence of detectable HCV RNA in serum as assessed by an HCV RNA assay with a lower limit of detection of 50 lU/ml or less 24

weeks after the end of treatment. Responses to therapy in chronic hepatitis C can be categorized as biochemical as shown by

1- normal alanine aminotransferase (ALT) levels

2- virological as shown by absence of detectable HCV RNA

3- hislological as shown by improvements in liver biopsy results.

The interferons have multiple effects like antiviral effect ,immunomodulatory effect ,antiproliferative effect and antifibrogenic effect.

Interferon-α has a myelosuppressive effect and decrease in peripheral blood counts occur in almost all patient ,Thrombocytopenia is one of the most common hematological complication with chronic liver disease and also to antiviral therapy.

This study aims to monitor occur thrombocytopenia after interferon therapy so should measure platelets level before ,at weekly intervals for 4 weeks, then every 3 months during treatment and 6 months latter

This study included 1000 patients with chronic hepatitis C virus infection who were treated by interferon and ribavirin in Liver Research Centre, Tanta Fever Hospital during the period from June 2007 to June 2009, the data of all patients were collected from their files included age ,sex, liver biopsy, laboratory investigation included (serum aminotransferase enzymes, serum albumin, serum bilirubin, prothrombin time, WBC, platelet count, PCR for HCV RNA).

This study shows majority in 750 males and minority in 250 females and response to interferon therapy in females higher than males .

Also, that the response to treatment with interferon is significant higher in patients wit low necro- inflammatory score, response to treatment with interferon is significant higher in patients with low fibrosis stage, there is significant post-therapy thrombocytopia in all patients groups(responder, resistant 12 and resistant 24) ,there positive correlation between the platelet count and the viral load an both pre and post-therapy groups there positive correlation between WBCs and platelet count in the pre-therapy treatment and also there is significant hypoalbuminemia in low platelet count .

And in this study proved occurrence post therapy thrombocytopenia by comparison platelet count before and during and after interferon therapy.

Recommendation

We recommend further studies on the interferon induced thrombocytopenia ,its relation with WBCs and its relation with other liver enzymes and functions (ALT,AST,bilirubin, albumin and prothrombin)

Also we recommend to put a clear cut off point when to start the interferon and at what time or platelet level we should stop.

Also we recommend further study about the activity and fibrosis and the level and degree that can predict the patients with high incidence of treatment failure and and patients with high incidence of complications.