# Summary

Hepatitis C virus is RNA virus 30-38 nm spread through blood and saliva, presented usually asymptomatic or non specific headache,myalgia, arthralgia, nausea and anorexia usually precedes the development of jaundice by a few days to 2 weeks. The liver is often tender but only minimally enlarged. Complications are Acute liver failure, Cholestatic hepatitis, Chronic liver disease and cirrhosis, Relapsing hepatitis ***(Males, S. et al., 2007).***

Treatment of chronic hepatitis C is one of the success stories of modern medicine. In the first interferon trials, interferon α three times a week achieved sustained virological responses in only a few patients ***(Davis, et al., 1989& di Bisceglie, et al., 1989)***.

Treatment is costly and not readily available for patients in areas where hepatitis C prevalence is high. Treatment is not easy, either. It often lasts 6 to 12 months and the drugs used are not always well tolerated.

Further progress is looming on the horizon. Knowledge of the molecular structure of the hepatitis C proteins has allowed the design of new drugs targeting the sites of HCV-encoded enzymes that are important for the

replication of the virus. The HCV protease and the HCV polymerase are currently the main targets. A new era of therapy for hepatitis C virus infection is dawning with the development of two effective HCV protease inhibitors, boceprevir and telaprevir.***(Jensen, D. 2011)***. Even if PEG-IFN and ribavirin remain the backbone of standard therapy for the next years, the new drugs have the potential of transforming the treatment of chronic hepatitis C infection. Further improvements may be "just around the corner".

Serum alpha-fetoprotein (AFP) is a fetal glycoprotien produced by yolk sac and fetal liver. following birth AFP levels decrease rapidly to less than 20 ng/ml and increase significantly in certain pathological conditions. Serum AFP is a debated, but routinely used marker for hepatocellular carcinoma (HCC) in patients with chronic liver disease. Yet, significant elevations of AFP are commonly seen in non-hepatic malignancies and benign conditins, such as acute and chronic viral hepatitis***(Abdol, H. et al., 2008 ).***

Previous studies confirms the value of serum AFP levels in predicting treatment outcome in patients with chronic hepatitis C, regardless of the infecting genotype. Higher levels of serum AFP may correspond to higher expression of HPC in individuals developing liver fibrosis.***(Abdol, H. et al., 2008 ).***

It's recommended for screening serum AFP levels before starting HCV treatment and considering it's level as a predictor of EVR and SVR.

It's recommended for further studies correlating both serum AFP levels as a predictive of EVR in treatment of chronic hepatitis C infection