# Thesis address:

Predictive value &changes in Child-Pugh score in chronic hepatitis C cirrhotic patients treated with Direct Acting Antiviral agents.

## **Abstract**

## **Background:**

Hepatitis C is a worldwide problem with a prevalence estimated to be 3 % according to the World Health Organization (WHO) about 130-150 million people worldwide are chronically infected with hepatitis C virus (HCV).). Egypt has the highest prevalence of HCV estimated to be 7.3% with predominance of genotype 4.

Direct -acting antiviral agents (DAAs) are highly effective and well tolerated in patients with chronic hepatitis C virus infection, including those with compensated cirrhosis.

The availability of potent, well-tolerated direct-acting antiviral agents (DAAs), which can be administered in short, interferon (IFN)-free regimens, has improved the management of patients with HCV infection dramatically. Clinical studies have demonstrated rates of sustained virologic response (SVR) of over 90% with these regimens, even in patients with compensated cirrhosis.

#### Aim:

The aim was to assess the clinical impact of direct-acting antiviral treatment in patients with compensated hepatitis C virus-related cirrhosis after one year of follow-up.

### **Methods:**

An observational prospective study was conducted on 100 patients with compensated cirrhosis treated in 2017, analyzing the evolution of liver function and the development of hepatocellular carcinoma and clinical decompensation.

#### **Results:**

The median follow-up time was 12 months. Most patients were males (60%), the mean age was 57.3 years. All participants were Child-Pugh A class at the start of the treatment. SVR 12 was achieved in all patients.

Eight patients suffered clinical decompensation, three (3.3%) of them changed to Child B and five (5.5%) patients changed to Child C. The incidence of de novo hepatocellular carcinoma during the follow-up was (4%). There was a significant improvement in the mean platelets count, AST, ALT(P < 0.001) after treatment and the mean albumin level decreased but still in the normal range.

#### **Conclusion:**

Treatment with Direct-acting antiviral was assosciated with high rates of SVR ,but not associated in the short term with a decrease in the development of hepatic decompensation or hepatocellular carcinoma compared to what it was reported for untreated compensated cirrhotic patients. There was an improvement in pre and post-treatment platelets count , AST, ALT, showing a probable improvement of liver fibrosis There were changes in albumin, bilirubin, INR, but all still in the normal range .

### **Keywords**

Direct-acting antiviral therapy, compensated cirrhosis, hepatocellular carcinoma, clinical decompensation.