ISSN: 2321-8819 (Online) 2348-7186 (Print) Impact Factor: 1.498 Vol. 6, Issue 11, November, 2018

Fate of Patients of Hepatitis C on Antiviral Therapy

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ABSTRACT

Objective: To study the Fate of Hepatitis C patients on antiviral therapy.

Place and Duration of Study: This study was carried out from March 2018 to Oct 2018 at Mayo Hospital, Lahore.

Materials and Methods: In this study 200 hepatitis C patients on antiviral therapy were included. Kit method was used for diagnosing hepatitis C in all the patients and thereafter before initiating antiviral therapy it was confirmed by quantitative PCR. Before the initiation of antiviral therapy, quantitative PCR, Liver Function Test, blood picture was calculated. In order to see the exact liver picture, the abdominal ultra sound was performed. All the Hepatitis C patients of this study had the following antiviral therapy. 1 Sofsububir 400mg (OD), 2. Daclatasvir 60mg (OD), 3. Rivavirin 400mg (TDS). After the completion of the therapy, these tests were performed again. In order to record age, sex and above tests, a Performa was designed. From all the participants of the research an informed written consent was obtained. Before collection and publish of data, the permission was sought from the ethical committee of the institution. SPSS version 10 was used for analysing the results.

Results: The hepatitis C frequency was found maximum 35 (17.5%), 13% male and 22% female between the age group of 41 to 50 years and was found minimum 7(3.5%) 1% female and 2.5% male between the age group of 61 years and above.

Relating to the antiviral therapy complications it was found that in 9% patients of hepatitis C the acities was seen, in 19% patients anaemia was seen, in 2% patients Hepatic Encephalopathy was seen and in 1% patients Liver Cirrhosis was seen .

When the therapy was finished 182(91%), were cured whereas 18 hepatitis C patients could not be cured.

Conclusion: The conclusion was drawn on follow up that in hepatitis C patients there were complications (Acities, Hepatic Encephalopathy, Anaemia, Cirrhosis etc.) even after the treatment of antiviral therapy

Key Words: Antiviral Therapy, Fate, Hepatitis C, PCR.

INTRODUCTION

Hepatitis C is main public health issue. Hepatitis C is the key cause for the chronic liver disease and sole most frequent sign for the liver transplantation among the 4 million Americans having the chronic infection(Asselah, Perumalswami, & Dieterich, 2014). Antiviral therapy is found effective in more than 50% of the patients infected whereas the real sustained rate of viral response depends on host, viral, and adherence elements(Akuta, Suzuki, Hirakawa, Kawamura, Sezaki, & Suzuki, 2011). Host and viral elements have no tendency for the modification, but adherence may be increased by interventions. However, adherence treatment is directly affected by the adverse effect from antiviral therapy and can reduce the probability of a sustained viral response(Foster, 2009).

The quality of life can hardly be compromised with these complications. Mostly HCC patients have underlying chronic liver disease, mainly resulting from chronic infections by hepatitis C virus (HCV), hepatitis B virus (HBV), consumption of alcohol excessively and sometimes on the connection of these cause. Due to the increasing incidence in the industrialised countries, HCC is gaining more interest(Liang & Heller, 2006). HepatoCellur Carcinoma (HCC) is the most fast enhancing reason for death due to cancer with HCV as the main aetiology generally affecting more than 50% of patients with HCC in developed countries like America(Backus, Boothroyd, Phillips, Belperio, Halloran, & Mole, 2011). The urgent need for identification of undiagnosed HCV infection has been highlighted by these researches by way of implementing HCV screening programs aiming populations with high risk and better access to new generation anti HCV therapies with decreased cost with effective treatment and follow-up(Fried, 2002). Retrospective questioning to the earlier treated patients mainly by interferon-based regimens have shown numerous post SVR HCC connected clinical variable, mostly are the identified HCC risk elements in patients having active GCV infection. Extra advanced liver fibrosis and biochemical or imaging substitute of histological fibrosis (for example serum albumin, fibrosis-4 index, platelet count, elastography-based lover stiffness, aspartate aminotransferase-to-platelet ratio index) before or/and after the treatment of antiviral are the most common

elements connected with high post SVR HCC risk. The object of the basic prevention is to delay or avoid the prevalence of HCC with the use of medical treatments(Lavanchy, 2008).

MATERIALS AND METHODS

In this prospective study, 200 hepatitis C patients on antiviral therapy were included.Kit method was used for diagnosing hepatitis C in all the patients and thereafter before initiating antiviral therapy it was confirmed by quantitative PCR. Before the initiation of antiviral therapy, quantitative PCR, Liver Function Test, blood picture was calculated. In order to see the exact liver picture, the abdominal ultra sound was performed. All the Hepatitis C patients of this study had the following antiviral therapy.

1. Sofsububir 400mg (OD)
2. Daclatasvir 60mg (OD)
3. Rivavirin 400mg (TDS).

After the completion of the therapy, these tests were performed again. In order to record age, sex and above tests, a Performa was designed. From all the participants of the research an informed written consent was obtained. Before collection and publish of data, the permission was sought from the ethical committee of the institution. SPSS version 10 was used for analysing the results.

RESULTS

The hepatitis C frequency was found maximum 35 (17.5%), 13% male and 22% female between the age group of 41 to 50 years and was found minimum 7(3.5%) 1% female and 2.5% male between the age group of 61 years and above (Table 1).

Table 1: Gender and age distribution

Age groups	Males	Females
20-30	9 (4.5%)	13 (6.5%)
31-40	11 (5.5%)	15 (7.5%)
41-50	13 (6.5%)	22 (11%)
51-60	12 (6%)	11 (5.5%)
61 and above	5 (2.5%)	2 (1%)
Total	100 (50%)	100 (50%)

Relating to the antiviral therapy complications it was found that in 9% patients of hepatitis C the acities was seen, in 19% patients anaemia was seen, in 2% patients Hepatic Encephalopathy was seen and in 1% patients Liver Cirrhosis was seen .

When the therapy was finished 182(91%), were cured whereas 18 hepatitis C patients could not be cured.

DISCUSSION

In the middle of 2011, HCV infection treatment was revolutionised by including Direct acting Antiviral Agents (DAAs) - the protease blockers boceprevir (Vic-trelis, Merck) and telaprevir (Incivek, Vertex) – to the ten years long period standard of care (SOC) therapy of pegylated interferon α-2a/b and ribavirin. This advancement resulted in marvellous need for HCV therapy, taking to supply of rationing and treatment triage. The idea of distributive justice with limited supply proposes that there is an urgent need of treatment for the patients having cirrhosis and therefore the treatment should be given on top priority basis, with asymptomatic patients having nominal fibrosis being at the other end of spectrum. Early experience with DAAs therapy shows this urgent need: tela-previr was started on the first 98 HCV infected patients, mostly 40% had advanced cirrhosis or fibrosis. The current review investigated the information on the DAAs in patients with cirrhosis and explained the development of HCV therapy in this special group form the standard of care therapy of the early ten years into the DAAs new age. Now with the use of antiviral agents the hepatitis C has become a curable illness (>95%). The side effects of hematologic are the most recurrent abnormal laboratory value which can result in reduced dose and termination of premature treatment. Interferon can affect white blood cell, haemoglobin and platelet values because of myelosuppressive effects.However, during the combination, the anaemia has been seen, mostly connected with the ribavirin resulting haemolytic anaemia. In the current research relating to the antiviral therapy complications it was observed that in 9% patients of hepatitis C the acities was seen, in 19% patients anaemia was seen, in 2% patients Hepatic Encephalopathy was seen and in 1% patients Liver Cirrhosis was seen

CONCLUSION

The conclusion was drawn on follow up that in hepatitis C patients there were complications (Acities, Hepatic Encephalopathy, Anaemia, Cirrhosis etc.) even after the treatment of antiviral therapy

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