

## A Case Report: Patient with the History of Hepatitis C Virus

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### Abstract

Hepatitis c virus is a RNA virus cause's inflammation of liver. Hepatitis C virus (HCV) is a major cause of liver disease worldwide, About 10 million Pakistani populations is infected with Hepatitis C virus. A male who is 19 years of age was indulged in fever and he visited the physician with the symptoms of stomach irritation and high temperature. Doctor advised him some lab tests like Complete blood count test and liver functioning test (LFTs), after the laboratory reports came he was diagnosed with increased values of liver enzymes then the physician recommended him polymerase chain reaction test and by this test his hepatitis confirmed and genotype of infection identified by other test and identified genotype is 3. Then the physician prescribed him drug therapy for six months, different adverse effects were observed during the course of treatment. After six months he got rid of hepatitis c but he felt weakness in his after the completion of drug therapy. Hepatitis C is caused by the hepatitis C virus. It is spread by contact with an infected person's blood, contaminated syringes and can also be sexually transmitted. There should be public awareness regarding disease to the patient, thus physician can play a vital role in the prevention of disease by the counseling the patients about Hepatitis C dangers. Now a day's its effective and useful therapy is available.

**Keywords:** Hepatitis C virus (HCV); Polymerase chain reaction (PCR); Liver functioning test

### Introduction

Hepatitis means an inflammation of the liver. Inflammation of the liver is due to a specific RNA virus which leads to chronic inflammation.

Hepatitis C virus (HCV) is a major cause of liver disease worldwide and a potential cause of substantial morbidity and mortality in the future. The complexity and uncertainty related to the geographic distribution of HCV infection and chronic hepatitis C, determination of its associated risk factors, and evaluation of cofactors that accelerate its progression, underscore the difficulties in global prevention and control of HCV. A large number of people infected with hepatitis in India [1], Pakistan and many other countries. About 10 million Pakistani populations are infected with Hepatitis C virus (HCV). The prevalence is even more pronounced among high risk population. The commonest mode of transmission is the use of

injections, unsterilized needles and contaminated instruments. The symptoms related to Hepatitis C are generally mild and flu-like and may include; Feeling very tired, Sore muscles, Joint pain, Fever, Nausea or poor appetite, Stomach pain, Itchy skin, Dark urine.

### Case Presentation

A young boy of 19 years old when he was studied at his college level was indulged in fever with his body pain and randomly vomiting. He went to his family's physician. After examination the physician prescribed him paracetamol 500 mg thrice a day levofloxacin 250 mg twice a day and dimenhydrinate 50 mg if necessary for 7 days. After one week the patient came back to the physician and asked him about his health. He was with unresolved fever and pale skin. The physician advised the patient some laboratory tests which were complete blood count (CBCs), liver functioning test (LFTs), typhoid test, electrolyte test. After the lab reports, in which the values of liver functioning test raised up to the threatened level (Tables 1 and 2).

Test description	Patient value	Reference value (RANGE)
T Lymphocyte cell	7.6	4-11
Red Blood Cell	6.12	4.2-5.5
Hb(Haemoglobin)	17.0	12.5-17.5
Platelet count	300	150-400
Neutrophils	63	45-65
Lymphocytes	29	20-40
Monocytes	05	2-10

Eosinophils	03	1-6
HCT(PCV)	51.5	40-54
TyphiDot Test		
TyphiDot	Negative	Negative

**Table 1:** Complete blood count test (CBC).

Test description	Patient value	Reference value (RANGE)
T Lymphocyte cell	7.6	4-11
Red Blood Cell	6.12	4.2-5.5
Hb(Haemoglobin)	17.0	12.5-17.5
Platelet count	300	150-400
Neutrophils	63	45-65
Lymphocytes	29	20-40
Monocytes	05	2-10
Eosinophils	03	1-6
HCT(PCV)	51.5	40-54
TyphiDot Test		
TyphiDot	Negative	Negative

**Table 2:** Liver functioning test.

Then the physician recommended him hepatitis B and hepatitis C tests. Hepatitis c was confirmed in the patient with lab test. Then the physician advised him polymerase chain reaction test (PCR) and HCV RNA Genotype, in this type 3 was detected (Table 3).

After diagnosis of hepatitis C virus of genotype 3, then doctor prescribed him sofosbuvir 400 mg once a day, ribavarin 400 mg twice a

day and paracetamol (500 mg) when patient feel in fever or increases body temperature. Different kinds of adverse drug reactions were reported during the course of therapy, in these including dizziness, loss of appetite, muscle weakness, diarrhea, fever, abdominal cramps, nausea, vomiting and depression [2].

TEST Name	Patient Result
HCV RNA Time PCR	Detected
Viral Load Of HCV RNA	135676 IU/ml

**Table 3:** Polymerase chain reaction quantitation.

## Discussion

Hepatitis c is a dangerous disease of liver which may be fatal and cause death. Many people don't know that they have hepatitis C until they already have some liver damage. Hepatitis C is caused by the hepatitis C virus. It is spread by contact with an infected person's blood. Share of needles and other equipment used to inject illegal drugs. It may also be spread with unsterilized tools for surgical operations, contaminated water, and contaminated blades and can also be transmitted by sex. A review article published on hepatitis c virus in Pakistan by Waheed et al. [3]. He took data of hepatitis c patients from 1994 to 2009 and concluded that hepatitis c is more common in adults

than other age groups and it is 57% more prevalent in injecting drug users.

Here the clinical implications of patient is that patient was cured after regular treatment, taking medications and by proper regular checkup. Patient was also suffered with different adverse effects during treatment but these all was cured with time [4,5].

## Conclusion

It is concluded that hepatitis c was previously more fatal than today because now a day's its rational therapy is available which is more cost effective and useful against the disease. We should use precautions to

avoiding the disease e.g. we should use purified water, use sterilized syringes, avoid smoking and use fresh foods. There should be public awareness regarding disease to the patient, thus physician can play a vital role in the prevention of disease by the counseling the patients about Hepatitis C dangers.

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