# A Case Report on Management of a HIV Positive Patient with Cirrhosis of Liver

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# Abstract:

**Introduction:** Liver disease has increased after the advent of highly active antiretroviral treatment, become a prominent non-AIDS-related cause of death in the HIV population. According to recent research, HIV Non-alcoholic fatty liver disease (NAFLD) is a type of liver disease that (NAFLD)and increasing liver fibrosis are more likely in individuals. The prevalence of the disease, its risk factors, and how to diagnose techniques for NAFLD in HIV mono-infected patients are summarized below.Non-AIDS causes of morbidity and mortality are becoming more common in HIV patients who have been infected for a long time. Liver disorders, in particular, have risen to one of the leading causes of death not connected to AIDS. When evaluating and caring for these patients, a complete understanding of the mechanisms underlying the development of liver disease is critical.

**Patient information:** A patient is a 31year old male, having chief complaints is hiccups, giddiness,hematemesis Malena, yellow discoloration of the skin, and also having fatigue and weakness. His weightis 46kg. He is admitted to the hospital on the date 10-12-2021.

**Clinical findings:** The patient appeared awake and oriented with individuals on general inspection. There are no high-risk variables. He was pale, anxious, and dyspnoeic throughout the examination. Patients with clinical symptoms that are very similar to those of our case have lately been described. Hehas circulating antibodies. **Medical Management:** Inhibitor drug-like inj. Cefotaxime 1 mg,antibiotic, tab. Zifi cv 200 mg,and inj. Metro 100 ml, and inhibiter also inj. Pan 40 mg, antiemetic that is inj. Emset 4mg. Prescribed. These drugs suppress the immune system and also provide inj. Vitamin k 10 mg.

**Nursing Management:** Administered fluid replacement (DNS and RL), maintained intake and output charts, and hourly monitored all vital signs. **Conclusion:** Development of antibodies against the HIV and liver cirrhosis; after providing medication, patients health was improved.

### Keywords: HBV DNA; HBsAg; cirrhosis; HIV

### Introduction:

HIV infection has progressed into a chronic illness since the development of effective combination antiretroviral therapy.<sup>1</sup>Significant reduction in AIDS-related deaths has been accompanied by an increase in liver-related morbidity and mortality due to co-infection with chronic hepatitis B and C viruses.<sup>2</sup>The Nonalcoholic Fatty liver disease, drug-induced hepatotoxicity, and hepatocellular cancer all contribute to the burden of liver disease in HIV patients. patients. <sup>3</sup>Illness pathogenesis mechanisms, and therapy alternatives, as well as the growing significance of transplantation of the liver.<sup>4</sup> A considerable decrease in mortality due to acquired immunodeficiency syndrome has been seen (AIDS).<sup>5</sup> The Antiretroviral therapy (ART) for the treatment of human immunodeficiency virus type 1 (HIV-1) infection is being developed (AIDS).<sup>6</sup>However, the liver illness remains the leading non-AIDS. In the post-ART period, it was the leading cause of death among HIV-infected patients, accounting for 14–18% of all fatalities and more than half of all HIV-infected patients admitted to hospitals.<sup>7</sup>The forms of liver illness that clinicians are likely to see in these individuals have envolved over time, just as the burden of non-AIDS morbidity and mortality has shifted during the ART period.<sup>8</sup>Chronic hepatitis C, chronic hepatitis B, and medication-related hepatotoxicity

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are some of the causes of liver disease among HIV-positive people in the ART era, which will be investigated in this study. In HIV+ individuals, Hepatitis B (HBV) or C (HCV) virus infection, alcohol addiction, and hepatotoxic drug exposure are all common causes of liver injury. The purpose of this study was to find out how common liver cirrhosis is in people with HIV+ patients, as well as its fundamental causes and clinical manifestations. The liver is frequently afflicted in HIV patients. HIV can infect liver cells, causing chronic inflammation that can affect organs throughout the body, even if the viral load is undetectable.

Certain HIV drugs, for example, might induce liver damage, The liver can be harmed by alcohol. various vitamins and herbal medicines, good substances important for patient health.Hepatitis A, B, and C, alcoholic liver disease, non-alcoholic fatty liver disease (NAFLD), and its more severe variant, non-alcoholic steatohepatitis, are all examples of viral hepatitis, and are all more common among HIV-positive people, than HIV-negative people (NASH). Cirrhosis, or liver scarring, can develop over time as a result of Hepatitis B or C, excessive alcohol consumption, fatty liver disease, and other liver diseases are all possible causes of liver damage are all possible causes of liver damage.<sup>9</sup>

# **Patient information:**

A patient is a 31year old male, having chief complete is hiccups, giddiness, hematemesis Malena, yellow discolouration of the skin, and also having fatigue and weakness. His weight is 46kg. He was admitted to the hospital on dated 10-12-2021.

**Patient-Specific Information:** The patient was admitted to TERTIARY CARE hospital with the above chief complete. Allroutine investigations are done. USG of pelvis done s/o hepatomegaly with altered echotexture with dilatedliver veins. Gastroscopy is done for esophagitis LA grade B with antral gastritis rut negative with smallHiatus Hernia.

## Primary concerns and symptoms of the patient:

A 31 yrs. The old male was visited in TERTIARY CARE hospital OPD with chief complaints of hiccups, giddiness, hematemesis Malena, yellow discoloration of the skin, and also having fatigue and weakness since form 2 weeks. Their Blood pressure is 120/80mmHg, pulse rate is 86beats/minute, and respiration is 20 breaths/minute.

Relevant past intervention with the outcome: The patient has no past medical and surgical history.

**Medical and family psychosocial history:**Present case had no medical and surgical history. In family history, he belongs to a nuclear family. He is mentally stable, conscious and oriented. He was maintainingexcellent relationships with family members, doctors and nurses as well as other patients also.

**Clinical findings:** the patient was hiccups, giddiness, hematemesis Malena, yellow discoloration of the skinand also fatigue and weakness science form 2 weeks. USG of pelvis done s/o hepatomegaly withaltered echotexture with dilated liver veins. Gastroscopy is done for esophagitis LA grade B with antralgastritis rut negative with small Hiatus Hernia. CBC is also done, HB is 13.1,much is 36.1,mcv is103.4,RBCs is 3.5,WBCs is 13500,platelet 2.9,HTC is 36.1 in patients body.

### **Diagnostic assessment:**

Ultraviolet sonography: USG of pelvis done s/o hepatomegaly with altered echotexture with dilated liver veins, Gastroscopy: Gastroscopy done esophagitis LA grade B with antral gastritis rut negative with small HiatusHernia.C. S. F. Examination: CSF received approximately 0.8 ml. Yellowish translucent fluid in a clot activatedbulb labelled as ascetic fluid. On wet mount RBC 2-3 cells/HPF WBC 1-2cell/HPF . TLC is approximately215cell/cumm.DLC 60 % polymorphous 40% Lymphocytes.KFT : KFT is done , urea is 77,creatinine is 3.4,sodium is 139,potassium is 5.4,LFT: LFT is done , alkaline phosphate is 132,ALT(SGPT) is also 132,AST(SGOT) 284,total protein8.1,albumin 3.0,total bilirubin 27.0, bilirubin coagulate 24.6,Globulin 5.1,bilirubin Uncoagulated2.4 .

### **Therapeutic Interventions:**

Present case took the medical management with inhibitor drug like inj.Cefotaxime 1 mg,antibiotic tab.zifi cv 200 mg,and inj. Metro 100 ml, and inhibiter also inj. Pan 40 mg,antiemetic that is inj. Emset 4 mg. prescribed. Provided inj. Vitamin K 10 mg.

Nursing perspective: IV fluid was provided to maintain the fluid, and electrolytes were Monitored.

### Discussion:

People with HIV frequently experience various health problems. Some of these problems can have a direct connection to HIV or HIV therapy. People with HIV are more susceptible to alcoholic liver disease, viral hepatitis (hepatitis A, B, and C), and other diseases than HIV-negative people.<sup>10-14</sup>

The leading cause of death among HIV-positive people that is not connected to AIDS is liver disease. AIDS is brought on by the human immunodeficiency virus (HIV). the cytomegalovirus illness (other than liver, spleen or lymph nodes). In people with HIV, liver cirrhosis and hepatic decompensation events occur often. Alcohol misuse

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and chronic HCV, but not chronic HBV, are significant contributors. Botanical Journal of the Linnean Society, Genetic investigation of variation in the bracken prothallus Hemolytic Anemia Linked to Liver Illness. In people with HIV, liver cirrhosis and hepatic decompensation events occur often. Alcohol misuse and chronic HCV, but not chronic HBV, are significant contributors. Transient elastometry has the potential to identify a large proportion of HIV-positive people with asymptomatic liver cirrhosis. Since the advent of highly active antiretroviral therapy (HAART) in 1996, liver illness has been discovered as a major cause of death in HIV-infected people. This new problem has largely escaped the attention of the HIV treatment community. The two main symptoms of liver illness in HIV-positive individuals at this time are drug-associated hepatotoxicity and viral hepatitides.<sup>15-18</sup>

## **Conclusion:**

Following Universal precautions while handling the HOIV positive patients is essential. The cases can be managed well with significant risk.

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