



(CASE REPORT)



Case study on viral hepatitis

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Abstract

The majority of such hepatic failure in children worldwide is due to viral hepatitis. This is a case report of an 8-year-old male child who had symptoms like headache, abdominal pain, cough, jaundice, loss of appetite, and white stools. On examination and with routine laboratory tests, the hematological parameters were found to be within normal limits, while the diagnosis of viral hepatitis was established clinically and through ruling out other causes. The child was managed on the lines of supportive and symptomatic pharmacotherapy that included antibiotics, analgesics, ursodeoxycholic acid, vitamin supplementation, and herbal hepato -protective agents. He improved symptomatically through the treatment course and claimed gradual recovery. This case highlights the other end of recognizing and managing a pediatric patient with viral hepatitis early enough.

Keywords: Viral hepatitis; Pediatrics; Hepato protective therapy; Acute liver dysfunction; Case report

1. Introduction

Hepatitis is one of the most common infectious conditions in all age groups, from childhood to adults. The word 'viral' defines the condition as a result of viral infection in the inflamed liver, often due to Hepatitis A, B, C, D, and E infection. Among these, Hepatitis A is well known as one of the leading causes of acute liver disease, especially in children, in areas with poor sanitation and hygiene practices. Most of the times Hepatitis A is transferred through fecal-oral route due to contaminated food or water. Even though most of the children have diseases without complications, the symptoms present with jaundice, abdominal pain, fever, dark urine, and pale stools.

This case report describes an 8-year-old male who had many different symptoms: headache, abdominal pain, jaundice, anorexia, and white stools. Eventually, laboratory tests confirmed acute viral hepatitis, with positive serology for HAV. The child was managed with supportive care, hepato protective drugs, and symptomatologic treatment, leading to gradual relief of symptoms.

The point made here is the importance of early recognitions as well as timely diagnosis and treatment to the patients with pediatric kidney disorders since these may help avert complications and, in many cases, afforded a complete recovery. The present case underscores the importance of thorough clinical examination and supportive management in such acute hepatic viral infections in children.[1]

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2. Case report

Patient Information:

- Name: XXX
- Age: 8 years
- Gender: Male
- Department: Pediatrics
- Date of Admission: 15th November 2024
- Chief Complaints:
- Headache for 2 days
- Abdominal pain in the peri-umbilical region for 20 days
- Cough for 3 days
- Yellowish discoloration of urine for 15 days
- Loss of appetite for 15 days
- White stools for 15 days

History of Present Illness: The patient provided with a 2-day history of modern headache, and 20-day proceedings of stomach pain localized within the peri-umbilical vicinity. He also had a 3-day history of cough, observed by means of yellowish discoloration of urine and white-colored stools for the closing 15 days. There became a slow loss of appetite mentioned over the same length. No fever or chills have been reported. The baby had no known records of recent journey or exposure to people with similar signs and symptoms. The parents denied any history of liver ailment or different systemic illnesses inside the own family. There turned into no great history of trauma or ingestion of poisonous substances.

Clinical Examination: Upon examination, the child regarded mildly jaundiced however became in any other case alert and cooperative.

2.1. Physical examination findings have been as follows

Vital Signs: - Temperature: 36.8°C - Pulse: ninety six beats per minute - Respiratory price: 18 breaths per minute - Blood strain: a hundred/60 mmHg - Oxygen saturation: ninety eight% on room air

2.2. General Examination

- Mild jaundice of sclera and skin discovered - No signs and symptoms of dehydration or misery - No signs and symptoms of hepatomegaly or splenomegaly upon palpation

Abdominal Examination: - Tenderness within the peri-umbilical vicinity with out a guarding or rebound tenderness - No palpable liver or spleen growth Laboratory Investigations: - Hematological Tests:

- Hemoglobin: 11.5 g/dL
- White blood cellular: 6.Eight x 10[^]nine/L
- Platelet depend: 220 x 10[^]nine/L
- These parameters were inside regular limits.
- Liver Function Tests: - Alanine aminotransferase (ALT): 210 U/L (Elevated)
- Aspartate aminotransferase (AST): 195 U/L (Elevated)
- Total Bilirubin: four. Five mg/dL (Elevated) - Direct Bilirubin: 2.5 mg/dL [Elevated]
- Alkaline Phosphatase: one hundred fifty U/L (Normal)
- Albumin: three.9 g/dL (Normal)
- Serological Tests: - Hepatitis A IgM: Positive (indicating acute contamination)
- Hepatitis B floor antigen (HBsAg): Negative
- Hepatitis C antibody: Negative
- Hepatitis E IgM: Negative
- Urine Analysis: - Dark yellow urine with bilirubin present
- No signs of contamination or abnormalities other than bilirubinuria

2.3. Diagnosis

Based at the medical presentation, laboratory findings (elevated liver enzymes, hyperbilirubinemia), and serological assessments displaying high-quality Hepatitis A IgM, the prognosis of Acute Hepatitis A become made. This was similarly confirmed by using the absence of other hepatotropic viruses (Hepatitis B, C, and E).

Management and Pharmacotherapy: The affected person turned into controlled with the subsequent

2.4. Pharmaco therapeutic regimen

- Tab. Ampicillin (500 mg): 1 tablet, PO, four times a day for 5 days to deal with any secondary bacterial infections.
- Tab. Paracetamol (500 mg): PO, as wished for symptomatic comfort of ache and fever.
- Tab. Ursodeoxycholic Acid (a hundred mg): 1 pill, PO, three instances a day, for hepatoprotective aid and to improve bile drift.
- Syrup -Vitamin C & Biotin (10 mL): PO, as soon as every day for dietary help.
- Syrup- Ambroxol-Guaiphenesin-Oxytetracycline (five mL): PO, once daily for cough remedy and mucolytic support.
- Syrup Silymarin (10 mL): PO, twice a day as a hepatoprotective agent to aid liver restoration.

Outcome: The affected person confirmed sluggish development in his signs and symptoms. The jaundice resolved over the route of 10 days, and stomach pain decreased notably inside 7 days of remedy. The affected person's urge for food steadily back, and the cough subsided after 5 days. Repeat liver characteristic tests showed a extensive reduction in ALT and AST tiers, and bilirubin stages started to normalize. The patient turned into discharged after 7 days of hospitalization in solid condition, with advice to follow up in 2 weeks for further monitoring of liver function

3. Discussion

Acute viral hepatitis is a common motive of liver dysfunction in children, with Hepatitis A virus being one of the most regularly encountered etiologies. Hepatitis A is usually transmitted through the fecal-oral direction, commonly due to contaminated food or water, and it commonly resolves spontaneously in most youngsters without causing persistent liver disease. The clinical presentation in children frequently consists of fever, malaise, jaundice, darkish urine, stomach ache, and modifications in stool color that is regular with the signs and symptoms provided via this patient. In this situation, the affected person become diagnosed with Hepatitis A based totally on fantastic serological tests and multiplied liver enzymes, which became managed with supportive care and pharmacotherapy, which includes hepatoprotective sellers inclusive of ursodeoxycholic acid and silymarin. The toddler's signs and symptoms improved over the direction of treatment, highlighting the importance of early prognosis and suitable supportive control in pediatric cases of viral hepatitis. [2-3]

4. Conclusion

Viral hepatitis in youngsters, especially Hepatitis A, must be considered in any pediatric patient offering with jaundice, stomach pain, darkish urine, and changes in stool colour. Early analysis and symptomatic control, together with hepatoprotective remedy, are key to making sure recovery. This case underscores the importance of appropriate clinical evaluation and treatment for finest outcomes in pediatric viral hepatitis.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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Author's short biography



This is **Suhana anjum** currently pursuing Pharm.d. Internship at Chelmeda anand rao institute of medical sciences. With a strong interest in clinical research and pharmaceutical science . I have attended two international conferences and have published three research papers in the field. I am dedicated in advancing my knowledge and contribution to the growing body of work in pharmacy and healthcare.