

VIRAL HEPATITIS- A

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ABSTRACT

Hepatitis A is an acute viral liver infection caused by the Hepatitis A virus (HAV), transmitted primarily through the fecal–oral route via contaminated food or water. It remains a major public health issue, particularly in regions with poor sanitation and hygiene. Although usually self-limiting, but severe cases can occur in older adults or those with pre-existing liver disease.^[1,2]

KEYWORDS: Hepatitis A, HAV, Fecal-oral transmission, acute hepatitis, vaccination, public health.

INTRODUCTION

Hepatitis is an inflammatory condition of the liver, most commonly caused by viral infections, but it can also result from toxic substances (alcohol, drugs), autoimmune diseases, or metabolic disorders.

It leads to hepatocellular injury and impaired liver function, affecting the metabolism of carbohydrates, proteins, fats, and detoxification processes.

1. Key Features

Feature	Hepatitis A	Hepatitis B	Hepatitis C	Hepatitis D	Hepatitis E
Transmission	Feco–oral	Parenteral, Sexual	Parenteral	Parenteral (needs HBV)	Feco-oral
Onset	Acute	Acute or chronic	Chronic	With HBV Only	Acute
Chronicity	No	Yes (5-10%)	Yes (70-85%)	Yes	No
Vaccine available	Yes	Yes	No	No	No
Complications	Rare	Cirrhosis, Carcinoma	Cirrhosis, Carcinoma	Fulminant Hepatitis	Liver failure in pregnancy

2. Types and Causes

Type	Causative Agent/ Etiology	Mode of Transmission	Remarks
Hepatitis A (HBV)	Hepatitis A virus	Feco-oral route (contaminated food/water)	Acute, self-limiting; no chronic stage
Hepatitis B (HBV)	Hepatitis B virus	Blood, semen, perinatal	May progress to chronic hepatitis, cirrhosis, or carcinoma
Hepatitis C (HCV)	Hepatitis C virus	Blood transfusion, IV drug use	Often chronic, can lead to cirrhosis
Hepatitis D (HDV)	Hepatitis D virus	Requires HBV co- infection	Causes severe coinfection or superinfection
Hepatitis E (HEV)	Hepatitis E virus	Feco-oral route	Self- limiting; dangerous in pregnancy
Non- viral causes	Alcohol, drugs (Paracetamol, isoniazid) autoimmune disorders	Toxic or immune- mediated	Can cause acute or chronic liver damage

CASE PRESENTATION

A 35years male patient was admitted in the Malla Reddy Hospital with the chief complaints of yellowish discolouration of skin, eyes for the past 4 days associated with dark coloured urine, fatigue, weakness, loss of

appetite, fever, nausea and headache.

-The patient also had body pains, itching of skin.

-The patient had a known case of HTN and was on TAB.TELMA - 20mg since 4 years.

-On Physical Examination the patient had Icterus.

INVESTIGATIONS**Liver Function Test**

PARAMETER	RESULT	NORMAL RANGE	REMARK
Serum Bilirubin (Total)	6.8 mg/dl	0-1 mg/dl	Elevated
Direct Bilirubin	5.8 mg/dl	0- 0.25 mg/dl	Elevated
Indirect Bilirubin	2.6 mg/dl	0.2-0.6 mg/dl	Elevated
SGOT (AST)	280 IU/L	≤ 65	Elevated
SGPT (ALT)	340 IU/L	≤ 337	Elevated
ALP	320 IU/L	44-147 IU/L	Elevated
ESR	15	0-10 mm/hr	Elevated

Urine Analysis

- Color : Dark yellow/brown
- PH: 5.5
- Proteins: Trace
- Bile Salts/Pigments: Present

Ultrasound Abdomen

- Mildly enlarged liver
- No gallstones
- Normal spleen size

Other Investigations

- **HAV IgM:** Positive – indicating acute Hepatitis A infection
- **HBsAg:** Negative

From the investigations the patient was diagnosed with **Acute Viral Hepatitis A with elevated liver enzymes.**

TREATMENT

TRADE NAME	Generic Name	Dose	Route	Frequency	Therapeutic Action/Use
T. PAN	Pantoprazole	40 mg	Oral (PO)	OD	Proton pump inhibitor- reduces gastric acid secretion and prevents gastritis due to medications
T. SILARIN	Silymarin	140 mg	Oral (PO)	OD	Hepatoprotective agent – protects liver cells and supports liver Function
T. DOMPERIDONE	Domperidone	10 mg	Oral (PO)	BD	Antiemetic – relieves nausea and vomiting
T. DOLO	Paracetamol	500 mg	Oral (PO)	BD	Analgesic and antipyretic – reduces pain and fever
T. NEUROBION FORTE	Vitamin B complex with B12	100 mg	Oral (PO)	OD	Vitamin supplement – improves metabolism and corrects vitamin deficiency
T.URSOKIL	Ursodeoxycholic acid	300 mg	Oral (PO)	BD	Choleretic and hepatoprotective – enhances bile flow and protects hepatocytes
CALAMINE LOTION	Calamine	-	Topical (E/A)	BD	Soothing agent – relieves itching and skin irritation
T. RIFAMPIN	Rifampin	150 mg	Oral (PO)	BD	Antibiotic – used here as a hepatoprotective and enzyme inducer (monitor liver function)
ZOREBOL-P	Aceclofenac + Paracetamol	100+325 mg	Oral(PO)	BD	Analgesic and anti- inflammatory – relieves body pain and fever

CONCLUSION

Supportive and symptomatic management was provided, including hepatoprotective agents (Silymarin), acid suppression (Pantoprazole), antiemetics (Domperidone),

vitamin supplementation (Neurobion Forte), and analgesics/antipyretics (Paracetamol). The patient was advised adequate rest, hydration, and a balanced diet avoiding hepatotoxic substances.

This case highlights the importance of early diagnosis, supportive care, and patient education in the management of Acute Viral Hepatitis A, which is generally a self-limiting disease with an excellent prognosis when managed appropriately.

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