

PROJECT PRAKASH

KEY LEARNING POINTS

Training: Hepatitis Induction Program

Topic: Complications of Viral Hepatitis

Faculty: Dr. Karthik Ponnapan T., Senior Clinical Fellow, Liver ICU, Kings George College Hospital, London, UK

Dr. Shivali Panwar, Assistant Professor, Anaesthesia & Critical Care, ILBS

Period: 2021 - 2022

Attendees: In-Service Nurses

Viral Hepatitis means inflammation (swelled or enlarged) of liver due to hepatitis viruses.

✚ Liver Disease

- Acute Liver Failure
- Chronic Hepatitis
- Hepatocellular Carcinoma
- Decompensated Cirrhosis

Complications

HAV	HBV	HCV	HDV	HEV
<ul style="list-style-type: none"> • Three rare complications are relapsing hepatitis, cholestatic hepatitis, and fulminant hepatic failure (FHF). 	<ul style="list-style-type: none"> • Chronic HBV 5-10% • risk for cirrhosis and hepatocellular (HCC) and FHF • with coagulopathy, encephalopathy, and cerebral edema. 	<ul style="list-style-type: none"> • Chronic HCV infection 50-60%. • At risk for chronic active hepatitis, cirrhosis, and HCC. • Extrahepatic complications: focal lymphocytic sialadenitis, autoimmune thyroiditis, porphyria cutanea tarda, lichen planus, & Mooren corneal ulcer. 	<ul style="list-style-type: none"> • Chronic coinfection with HBV/HDV often leads to rapidly progressive subacute or chronic hepatitis. • 70-80% of these patients develop cirrhosis. 	<ul style="list-style-type: none"> • Usually mild and self-limited. The case-fatality rate reaches 15-20% in pregnant women. • HEV infection does not result in chronic disease.

✚ 3 major sources of mortality in liver failure

- Cerebral edema
- Infection
- Multiorgan failure

✚ Kings College Criteria

- Non-paracetamol
 - INR>6.5 or
- Any 3 of the followings:
 - Age<10 or >40 yrs
 - Duration of jaundice>7 d
 - Total Bili>300

- INR>3.5
- Etiology: idiosyncratic drug, halothane, idiopathic, non-A non-B hepatitis

+ Paracetamol induced

- Ph<7.3
- Or all 3 of
- INR >6.5
- CREATININE >3.4 mg/dl
- Encephalopathy grade 3 or more

+ Transplantation

- < than 10% in patients with ALF
- 72% survival at 5 years (ELTR database, 2012)
- Most fatalities post transplantation is infection-related

+ Chronic Liver Disease

- GI Bleeding
- Hepatic Encephalopathy
- Sepsis/ AKI/ SBP

+ Initial Management in CLD

- Large bore access
- Low threshold for intubation
- NGT
- Hb: 7 – 8
- Platelet >50/Fib >1/ INR <1.5
- Endoscopy
- Terlipressin Somatostatin Ocreotide

+ Indication and placement for SB tube/ Minnesota tube

- Bleeding upper gastrointestinal varices resistant to medical and/or endoscopic treatment.
- CI -GI anomalies
