# INTRODUCTION

Acute infection of the liver may be due to wide range of pathogens. the outcome of infection is dependent not only on the cause but on the host immune response , complete recovery depends on elimination of the infecting agent, resolution of inflammatory changes and prevention of re-infection by effective antibody production. Viral hepatitis may be due to hepatotropic viruses or with viruses predominately associated with extra hepatic manifestation .Non viral hepatitis causes are less common but must be considered. Most common causes of hepatitis is: viral infection HAV ,HBV, HCV, HDV, and HEV , and other non hepatic viruses as EBV,CMV, HERPS SIMLLEX. ( ***Deirdre A., 2000)***.

Hepatitis A, one of the oldest diseases known to humankind, is a self-limited disease which results in fulminant hepatitis and death in only a small proportion of patients. However, it is a significant cause of morbidity and socio-economic losses in many parts of the world.

Transmission of HAV is typically by the faecal-oral route. ***(Lemon SM.,1997 )***

The introduction of effective hepatitis A vaccines in US, Israel, selected regions of Italy, Spain and Australia in the mid-1990s provided the first specific tool for preventing HAV infection.

***(Wasley et al., 2006)***.

Individuals with HBV are at risk of developing chronic infection, cirrhosis, hepatic decompensation, and hepatocellular carcinoma. After the acute infection, 3%–5% of adults and up to 95% of children fail to produce a sufficient immune response to clear the infection, thus going on to chronic hepatitis B***. (Lee W. ,1997).***

HCV is a blood borne virus that is most efficiently transmitted through large or repeated percutaneous exposures to blood, such as transfusions or transplants from infected donors, inadvertent contamination of supplies shared among patients undergoing chronic hemodialysis or sharing of equipment among injection drug users. Transmission of HCV through Perinatal exposure, percutaneous exposures in the health care setting or exposure to an infected household contact. ***(Alter MJ.,2007)***.

Just like HAV, HEV is transmitted from person-to-person via the faecal-oral route. Hepatitis E is a waterborne disease and contaminated water or food supplies have been implicated in major outbreaks. ***(Harrison TJ., 2000) .***