

## Acute Liver Failure: An Update

Nasir Khokhar, Tariq Khan Niazi

Department of Medicine, Shifa International Hospital and Shifa College of Medicine, Islamabad.

### Abstract

Acute liver failure is a serious medical emergency resulting from various insults that liver sustains. In our setting, viral etiology is the commonest cause. The syndrome results in significant liver damage leading to hepatic encephalopathy, coagulopathy and several other serious clinical consequences. Sepsis, cardio vascular failure and renal failure can result in multi system organ failure and fatal consequences. Management requires identification of etiologic agent as soon as possible. Nursing care in intensive care unit (ICU) setting is recommended. Attention towards correction of electrolyte imbalance, coagulopathy, encephalopathy and systemic complication along with judicious use of antibiotics help in obtaining a favorable outcome. Transplant remains the ultimate management.

**Key words:** Liver failure, acute.

### Introduction

Acute liver failure (ALF), also called fulminant hepatic failure was described as a specific and unique entity in the United States in the early 1950's. Exact definition remains a matter of discussion. This syndrome of severe impairment of liver function leading to hepatic encephalopathy, coagulopathy and jaundice may result in cerebral edema which is the most common cause of death, and was first described in 1969<sup>1</sup>. The condition can be a catastrophic illness as it can rapidly progress to coma and death because of multi organ dysfunction, especially in children<sup>2</sup>. Mortality had approached nearly 100%, but more recently, and with the advent of liver transplantation in the more developed countries, the survival rate has improved to 70%. In under developed countries, however, fulminant hepatic failure (FHF) can be a devastating disease due to lack of advanced critical care support and liver transplantation<sup>3,4</sup>. Recent classification of ALF broadly separates this condition into hyper-acute, acute and sub-acute, based on time interval between the development of jaundice and encephalopathy. An interval of less than 7 days is hyper-acute, 8-28 days is acute and 29 days to 12 weeks is sub-acute<sup>1</sup>.

### Corresponding Author:

Nasir Khokhar

Department of Medicine

Shifa International Hospital and

Shifa College of Medicine

Islamabad.

Email: [drnkhokhar@yahoo.com](mailto:drnkhokhar@yahoo.com)

### Etiology

In western world, most cases of ALF had been related to drug overdose, specifically paracetamol which has been much more prevalent in United Kingdom and United States<sup>1</sup> but not in Spain<sup>5</sup> and Germany<sup>6</sup>. In under developed countries; the viral etiology of ALF has been most frequent and hepatitis A has been noted as a frequent cause of FHF in Pakistan<sup>7</sup>. Hepatitis B related ALF has