Abstract

Fulminant hepatic failure (FHF) is a dramatic and challenging syndrome in clinical medicine. Although an uncommon disorder, it is usually fatal and occurs in previously healthy person. While the causes of FHF remain unclear, viral hepatitis and drug-induced liver injury account for the majority of cases. Hepatitis E causes large-scale epidemics of hepatitis in the Indian subcontinent, involving hundreds of thousands of cases with high mortality. FHF is associated with several clinical features like jaundice, shrunken liver, easy bruising, low levels of serum proteins, fatigue, multi-organ failure etc and metabolic derangements like hypoglycemia, hyperlipidemia, hyponatremia, defective protein synthesis, reduced energy production, decreased rate of urea production etc. These disturbances are predominantly attributed to oxidative stress, membrane destabilization and osmolytic imbalances. The options available for these patients are quite minimal with liver transplantation being one of them. But the procedure is ridden with issues causing it to find less favor among the patients and the caregivers. Use of hepatoprotective and cytoprotective drugs, is being considered to be a more acceptable alternative as a strategy to enhance liver regeneration. In this regard use of taurine a naturally occurring amino acid that plays a crucial role in many physiological processes would prove to be effective. In the present study, hepatoprotective effect of taurine on a rat model of induced FHF was studied. Taurine supplementation has effectively counteracted the metabolic and structural aberrations in the liver caused by D-galactosamine intoxication.