

Abstract

Background: Numerous papers have reported a high incidence of adrenal failure in critically ill patients, including those with end stage liver disease .

The term hepatoadrenal syndrome has been used to describe such an association between liver disease and adrenal failure and the definition of this term extends beyond the occurrence of sepsis, which is a frequent complication of liver failure.

Objective: to detect Prevalence of Adrenocortical Insufficiency in Patients with Liver Cirrhosis, Liver Cirrhosis and Septic Shock and in Patients with Hepatorenal Syndrome.

Methods: our study was conducted on three groups of patients (total 45 patients) 21 patients were males 24 patients were females With mean age 57.44 ± 9.95 . (Cross sectional study) in whom adrenal function was assessed by synacthen test which was performed within the first 24 hours of admission. They were divided into 3 groups All included patients were subjected to full clinical evaluation , MELD scoring and child classification ,routine laboratory investigations , synacthen test was performed within the first 24 hours of admission..

Results: Our results showed that adrenocortical insufficiency was found in 33 patients from the whole 45 patients (73.3% of all patients had adrenocortical insufficiency).Patients with child C liver cirrhosis has more risk to have adrenocortical insufficiency than patients with child A ,B liver cirrhosis (P value = 0.013).Cirrhotic Patients with high MELD score have higher incidence of adrenocortical insufficiency($p=0.008$). MELD score may be a good predictor for adrenocortical insufficiency With MELD cut off score 25.5 sensitivity was 0.727 and specificity was 0.750 Cirrhotic Patients with renal impairment have higher incidence of adrenocortical insufficiency :patients with high serum creatinine level have higher incidence of adrenocortical insufficiency ($p=0.027$), patients with high serum BUN level have higher incidence of adrenocortical insufficiency ($p=0.012$)

Conclusion: In conclusion, adrenal dysfunction is common in patients with cirrhosis and in patients complicated by hepatorenal syndrome. In patients with liver cirrhosis Adrenal dysfunction is associated with renal dysfunction. It occurs more frequently in patients with more severe liver disease and Correlates with disease severity scores.According to our study MELD score and serum Bilirubin level may be good predictors for hepatoadrenal syndrome.

Key words: liver cirrhosis, Child classification, hepatoadrenal syndrome, hepatorenal syndrome,. adrenocortical insufficiency ,MELD score .