Introduction

Bacterial infections are frequently observed in hospitalized patients with liver disease and life-threatening illnesses. Hepatic patient are particularly susceptible to such infection because of increased bacterial translocation, possibly related to liver dysfunction and reduced reticuloendothelial function **(Loannis et al., 2006).**

Procalcitonin (PCT), a 116-amino acid prohormone of calcitonin, has been useful in early diagnosis and monitoring of severe bacterial infection and sepsis. It is a sensitive and specific test for detecting systemic versus local bacterial infection and for discriminating between bacterial and nonbacterial etiology of inflammation in pediatric patients **(Korczowski and Szybist 2004).**

Several human organs and tissues are able to synthesize PCT but the liver is the main organ producing PCT in response to bacterial infection **(Kretzschmar et al., 2001) and (Korczowski, 2006).**

Serum procalcitonin levels are significantly higher in hepatic patients with bacterial infection than in hepatic patients without bacterial infection **(Loannis et al., 2006).**

Viral diseases, autoimmune diseases, neoplastic disorders, local bacterial infection and organ-related bacterial infections do not induce PCT. PCT can be used for the differential diagnosis of bacterial and non-bacterial disorders **(Lorrot et al., 2000).**