

Early identification of patient at risk of acute severe pancreatitis with Systemic Inflammatory response syndrome (SIRS) at admission

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ABSTRACT

Introduction and Objective: Clinically, the Systemic Inflammatory Response Syndrome (SIRS) is identified by two or more symptoms including fever or hypothermia, tachycardia, tachypnoea and change in blood leukocyte count. The relationship between SIRS symptoms at the time of presentation and severity of pancreatitis is yet to be determined though progression of SIRS in subsequent days has been already correlated. The aim of our study was to determine the severity of pancreatitis with SIRS score at the time of admission.

Materials and Methods: We conducted a prospective cohort study of consecutive patients admitted to the emergency of KMCTH, with a diagnosis of Acute Pancreatitis (AP) from December 2014 to January 2016. Clinical, biochemical and imaging data from the patients were collected to diagnose pancreatitis. Acute Pancreatitis was diagnosed as per Revised Atlanta Classification 2012. SIRS was evaluated at the time of admission and was correlated with the Modified Marshall scoring system for organ dysfunction and sensitivity, specificity and predictive value of SIRS score at admission for organ failure was calculated.

Results: Among 41 patients admitted with a diagnosis of Acute pancreatitis irrespective of cause, the sensitivity of SIRS score at admission in predicting Severe pancreatitis was 28 %, specificity was 80%, Positive predictive value was 60 % and NPV was 51 %, with a P value of 0.52 and odds ratio of 1.6 (CI- 0.376-6.808)

Conclusion: This study showed that SIRS score at admission is not sensitive in predicting severe pancreatitis, however, it is specific for severe pancreatitis.

Key words: Acute Pancreatitis, SIRS, severe pancreatitis