

# PROGNOSTIC VALUE OF HYPOCHOLESTEROLEMIA IN SEPSIS

## ABSTRACT

Sepsis is the most common cause of death in Intensive Care Unit. The need for an early prognostic marker to identify those at highest risk for mortality in sepsis is essential. The objective of this study is to assess whether hypocholesterolemia can be used as a prognostic indicator in sepsis, this study was conducted in intensive medical care unit of Stanley medical college hospital, 100 patients were included in the study after following inclusion and exclusion criteria. For each patient, data on age, gender, comorbidity, length of ICU stay, and 28-day mortality were collected, Sequential Organ Failure Assessment (SOFA) scores, and laboratory data, including cholesterol, TG, HDL, LDL were collected on days 0 and day 3. Descriptive statistics were done for all data and were reported in terms of mean values and percentages. Suitable statistical tests of comparison were done. Continuous variables were analysed with the unpaired t test. Categorical variables were analysed with the Chi-Square Test and Fisher Exact Test. Statistical significance was taken as  $P < 0.05$ . Conclusion: The risk of death is 4.49 times significantly more in patients admitted in ICU with sepsis when they present with SOFA Score Day 1  $\geq 2$ . It is statistically significant with a p-value of 0.0287, The risk of death is 4.91 times significantly more in patients admitted in ICU with sepsis when they present with hypocholesterolemia. It is statistically significant with a p-value of 0.0021, hence, hypocholesterolemia can be used as a reliable prognostic marker in patients with sepsis.