TO STUDY ASSOCIATION OF SERUM FERRITIN WITH CLINICAL OUTCOME OF COVID-19 PATIENTS: A PROSPECTIVE STUDY

Abstr act

Aim of the study: To determine the role of Serum ferritin in assessing the severity and outcome of COVID-19.

Background: COVID-19 a pandemic, affecting worldwide causing significant morbidity and to some extent mortality needs to be evaluated and urgently identify reliable predictors of disease severity and outcome.The fatal outcomes by COVID-19 are accompanied by cytokine storm syndrome. The cytokine storm is determined by serum ferritin.

Methods: A single-center, prospective, observational study was conducted among SARS-CoV-2 infected patients from March 2020 to May 2020. The diagnosis was confirmed by real-time polymerase chain reaction (RT-PCR). Serum ferritin levels were compared with the treatment outcomes of COVID-19 positive patients.

Results: A total of 1977 COVID-19 patients were studied. The mean age was 43.89±15.58 years and had male preponderance of 61.56% of the total subjects. The mean serum ferritin levels among recovered and expired patients were 1225.6 ± 2502.91 ng/ml and 285.71 ± 391.99 ng/ml , respectively.

Conclusion: Serum ferritin was markedly increased in COVID-19 patients who could not survive as compared to the patients who finally recovered from the infection, proving it as a useful marker for assessing the severity of COVID-19.

Keywords: COVID-19; Serum ferritin; cytokine storm