ROLE OF SERUM FERRITIN IN ASSESSING SEVERITY OF COVID 19 IN CHILDREN

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INTRODUCTION

Ferritin is widely known as representative of iron boy stores but was noted with prognostic function associated with COVID-10. This study was aimed to evaluate published data on serum ferritin levels with severity of COVID-19 infection among children.

OBJECTIVES

The objective of this study is to investigate the relationship of serum ferritin in COVID-19 disease severity among children.

METHODOLOGY

Literatures investigating measurement of serum ferritin and COVID-19 among pediatric population were systematically searched from PubMed, EMBASE and WHO.

A meta-analysis was done to compare serum ferritin levels between mild versus severe disease, and admission to ICU versus non-ICU patients

RESULTS

A total of 7 studies in which 5 studies measuring serum ferritin with disease severity, and 3 studies measuring serum ferritin and ICU admission were included in this meta-analysis. In the evaluation of ferritin levels and disease severity, results showed significant and substantial heterogeneity ($I2=100\%$, $Q=530.94$, $p<0.001$). There is no sufficient evidence to say that the mean ferritin levels significantly differ between mild and severe COVID-19 patients.

CONCLUSION

In this study there is no significant difference between ferritin levels of mild versus severe cases, and ICU versus non-ICU which may be due to high heterogeneity of the studies included.