

البحث الرابع

Clinical characteristics of Egyptian male patients with COVID-19 acute respiratory distress syndrome

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Abstract:

Background: Coronavirus disease 2019 (COVID-19) is a serious illness caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and in severe cases associated with acute respiratory distress syndrome (ARDS).

Objective: To describe the clinical characteristics of patients with ARDS-COVID-19.

Materials and methods: This study involved 197 male Egyptian participants, among them 111 COVID-19 patients presented with ARDS, 60 COVID-19 patients presented with non-ARDS, and 26 Non-COVID-19 patients. We reported the analysis results of clinical and laboratory information, including blood routine tests, blood biochemistry parameters [aspartate aminotransferase (AST), alanine aminotransferase (ALT), creatinine and C-reactive protein (CRP)], thrombotic activity (D-dimer) and serum ferritin and lactate dehydrogenase (LDH).

Results: The levels of hemoglobin, AST, creatinine, monocyte count, monocyte %, RBC count, TLC, and platelet count were not significantly different among the groups. The lymphopenia and increased CRP, ALT, D-dimer, ferritin, and LDH were observed in patients with ARDS-COVID-19.

Conclusion: COVID-19 patients with ARDS presented with lymphopenia, increased thrombotic activity, increased CRP, LDH, and ferritin levels. The results revealed that CRP, D-dimer, LDH levels, and lymphopenia have a significant association with the COVID-19 severity and can be used as biomarkers to predict the disease severity.