

FACTORS PREDICTIVE OF RHABDOMYOLYSIS IN SARS PATIENTS

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BACKGROUND: Severe acute respiratory syndrome (SARS) is caused by a new corona virus (CoV), which results in respiratory failure. Factors predictive of rhabdomyolysis have not been well described in SARS patients.

METHODS: From March 8 to June 15, 2003, 79 adult patients diagnosed as probable SARS were enrolled for analysis. Rhabdomyolysis was observed in 9 patients (11%) categorized as Group I. The remaining 70 patients were categorized as Group II.

RESULTS: Group I patients had higher hematocrit and C-reactive protein (CRP) levels than Group II patients. Group I had more severe disease with higher rates of respiratory failure. Group I patients were more likely to receive depolarizing neuromuscular blocking agents during intubation and immunoglobulins and require more prolonged usage of steroids or pulse steroid therapy. Incidence of acute renal failure, gastrointestinal bleeding, bacterial superinfections and mortality rates were also higher in Group I patients. Using multivariate analysis, initial hematocrit and CRP levels were identified as independent factors in predicting the occurrence of rhabdomyolysis in SARS patients.

CONCLUSION: Rhabdomyolysis may occur as a late complication of SARS-CoV infection and its presence implies the more severe clinical course of SARS. High initial hematocrit and C-reactive protein levels were two factors predictive of the occurrence of rhabdomyolysis in SARS patients.

Keyword: Creatinine phosphokinase, rhabdomyolysis, SARS