Clinical course and prognostic factors of patients with SARS-COV-2: a retrospective cohort study

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April 28, 2020

Abstract

Objective: To explore the prognostic factors of different prognosis SARS-COV-2 patients, including early cure (less than 3 weeks), severe death, severe survival (duration of disease over 30 days, stable condition). Methods: The general situation and laboratory tests and other relevant indicators of 50 early cured patients, 50 severe survivors and 50 severe deaths were studied. Results: Through a retrospective cohort study, there were significant differences in age, gender, respiratory distress symptoms, oxygen saturation of fingertip, state of consciousness between cured mild patients and dead patients. Diabetes and cerebrovascular disease were the main influencing factors of previous medical history. Most of the laboratory test indicators, such as the positive rate of nucleic acid test, blood routine test, myocardial infarction marker, DIC, liver and kidney function, inflammatory cytokines, are different between cured patients and dead patients. Further compared the cases of severe survival and dead patients, there were significant differences in gender, breath shortness symptoms, oxygen saturation of fingertip, consciousness, cerebrovascular disease. The laboratory tests showed that the blood routine test, MH, CK-MB, pro BNP,BUN, Cr, albumin, DIC, inflammatory factors and electrolyte disorders were great significance to the prognosis. Further study showed that CTnI, Cr and DIC and shortness of breath were independent prognostic factors of death. Conclusion: Our data may suggest that the main influencing factor of death was the degree of respiratory symptoms. The difference of prognosis was more related to whether there were multiple organ diseases, especially the heart, kidney and immune system dysfunction.

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