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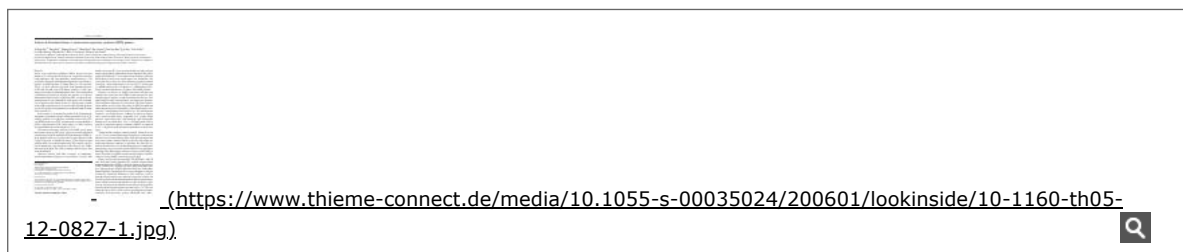
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Further Information

Abstract

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References



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Analysis of thrombotic factors in severe acute respiratory syndrome (SARS)

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Dear Sir,

Severe acute respiratory syndrome (SARS) disease has been shown to be associated with changes in coagulation related to both pulmonary and extra-pulmonary manifestations (1). We previously discussed inflammation-dependent coagulation responses in SARS-patients in Hong Kong (2). In particular, 44.8% of these patients presented with thrombocytopenia, 45.0% had elevated levels of D-dimers, and 42.8% had a prolonged activated partial-thromboplastin time. This combination of pathological parameters suggests the presence of a form of disseminated intravascular coagulation (DIC) or unusually disseminated small vessel thrombosis in the lungs with consumption of platelets and clotting factors (2). Post-mortem examinations indicated the presence of vascular fibrin thrombi, pulmonary alveoli capillary microthromboses or thromboembolic bronchial arterioles (3).

In this study, we examined the profile of the inflammation-dependent coagulation response and measured the levels of circulating markers of coagulation, including tissue factor (TF), von Willebrand factor (vWF), plasminogen activator inhibitor-1 (PAI-1) and vitronectin (VN), which serves as a PAI-1 cofactor for rapid inhibition of activated protein C (4).

All sixteen consecutive patients with SARS (seven male; nine female; mean age 40.5 years), who were newly hospitalized and diagnosed with the modified WHO definition of SARS (5) in the medical intensive care unit of the Xuanwu Hospital of the Capital University of Medical Sciences, China between April and June 2003, were enrolled in the study. The samples were collected immediately after diagnosis of the disease. One SARS-infected patient died. The clinical findings and laboratory data were documented.

Nineteen patients with other etiologies of community-acquired pneumonia (*Streptococcus pneumoniae*) (15 male; four

female; mean age 50.5 year initial radiographic manifest graph and abnormal CT scan involvement or lower-zone associated with at least one secretions, a body temperature (> 10,000 leukocytes/ μ l) or These patients had no histo

Presence or absence of confirmed by testing for a Nasopharyngeal-aspirate, sampling and processing of microded to confirm the diagnosis tation and the severity of th of the other etiologies of co reported (6). Demographic fa residence, coexisting illness ation, altered mental status pressure, temperature pulse findings were recorded. He oped acute respiratory dist to 5.3% in patients with in ogies.

Twenty healthy volunteers age 43.7 years) recruited from members were included in have major chronic medical medication known to influence significant abnormalities were participants were not anaer functions. They did not have tients. The absence of SARS ed by test of anti-SARS-co

Plasma levels of the pro were determined using color immunosorbent assay (ELISA) (USA), DAKO (UK), Sunbtria). Non-parametric ANOVA Dunn's Multiple Comparison statistically significant difference operating characteristic curve test characteristics for distir tients with the infectious p mal cut-off points were id power by the misclassification under the curve (AUC) of 1 sensitivity and specificity

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