Procalcitonin and Other Biomarkers in Sepsis Patients: A Prospective Study

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Abstract: Objectives: The aim of this study is to evaluate the association of mid-regional pro-atrial natriuretic peptide (MRproANP), procalcitonin (PCT), proendothelin-1 (proET-1) levels with sepsis severity in Emergency ward patients. Materials and Methods: We assessed the predictive value of MRproANP, PCT, copeptin, and proET-1 in early sepsis among patients referring to the emergency ward with a suspected sepsis. Results-132 patients were enrolled in this study. 45 (34%) patients had a final diagnosis of sepsis. A higher percentage of patients with definite sepsis had systemic inflammatory response syndrome (SIRS) criteria at initial visit in comparison with no-sepsis patients (P<0.05) and were admitted to the hospital (P<0.05). PCT levels were higher in sepsis patients [P<0.05]. There was no significant differences for MRproANP or proET-1 in sepsis patients (P=0.47). Conclusion: A combination of SIRS criteria and PCT levels is beneficial for the early sepsis diagnosis in emergency ward patients with a suspicious infection disease.

Keywords: emergency, prolactin, sepsis, biomarkers

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