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THROMBOELASTOMETRY PROFILE IN CRITICALLY ILL PATIENTS

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We use this protocol and it's working

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Abstract

ABSTRACT

BACKGROUND: Transfusion therapy is associated with increased morbidity, mortality and costs. Conventional coagulation tests are weak bleeding predictors, poorly reflecting coagulation in vivo. Thromboelastometry (ROTEM) provides early identification of coagulation disorders and can guide transfusion therapy by goals, reducing blood components transfusion. **Objective:** The aim of this study is to describe coagulation profile of critically ill patients using ROTEM and evaluate the association between CCT and thromboelastometry. **METHODS**: This is a retrospective, observational study conducted in medical-surgical intensive care unit (ICU). Adult patients (≥18 years) admitted to ICU between November 2012 and December 2014, in whom ROTEM analyses were performed for diagnosis of coagulopathy, were included in this study. The first ROTEM and CCT after ICU admission were recorded simultaneously. Additionally, we collected data on blood components transfusion and hemostatic agents immediately after laboratory tests results. **RESULTS**: The study included 531 patients. Most ROTEM tests showed normocoagulability profile [INTEM (54.8%), EXTEM (54.1%) and FIBTEM (53.3%)] with divergent results in relation to CCT: low platelet count (51.8% in INTEM and 55.9% in EXTEM); prolonged aPTT (69.9% in INTEM and 63.7% in EXTEM) and higher INR (23.8% in INTEM and 27.4% in EXTEM). Approximately 16,7% of patients with normocoagulability in ROTEM received platelet concentrates and 10% fresh frozen plasma . **CONCLUSION**: The predominant ROTEM profile observed in this sample of critically ill patients was normocoagulability in contrast to CCT, suggesting coagulopathy and leading to a possibly unnecessary allogenic blood component transfusion. ROTEM test may avoid inappropriate allogeneic blood products transfusion in these patients.

Attachments

XLSX

data protocol.xlsx

1,018KB

Troubleshooting

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