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The Journal of TRAUMA® Injury, Infection, and Critical Care

It is Time to Assess the Utility of Thrombelastography in the Administration of Blood Products to the Patient With Traumatic Injuries

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Jeager and Zimmermann[1] have demonstrated that thrombelastography (TEG) can be conducted rapidly in the emergency department, providing a wide range of information on coagulation status, with data available before conventional laboratory values can be obtained. The use of blood products in patients with trauma is empiric and "blind," especially in patients requiring massive transfusion (≥10 units of packed red blood cells in 24 hours).[2–4] It is often stated that coagulation status is the most reliable indication of outcome on admission of the patient with traumatic injuries and should be used to direct the transfusion of blood components.[5–8] Although results from some studies strongly recommend the TEG to define a patient's coagulation status, and potentially direct administration of blood products in patients with trauma, none has yet been sufficiently powered to demonstrate, specifically, how TEG might transform transfusion guidelines.[4,8–10] Only a large multicenter study can conclusively demonstrate the effectiveness of rapidly available TEG data and provide the means to develop algorithms to optimally direct blood product use, which, in turn, will reduce overall blood product administration and improve outcomes. The work of Jeager and Zimmermann[1] provides further evidence that such a study of TEG use should be undertaken.

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