

Critical illness associated hemostatic failure-diagnostic revival of the bleeding time test?

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‘Where there are ruins there is hope for a treasure’

Mohammad Hafiz Shirazi

(1315-1390)

There is a labyrinth of dilemmas and controversies for the internists and other profiles of physicians who practice in the Intensive Care Unit (ICU) and manage the most complex patients.

The conundrum of hemostatic disorders can be overwhelming when a practicing clinician is engaged in the multidimensional treatment of critical illness.

Thus, we propose to introduce the term Critical Illness Associated Hemostatic Failure – CIAHF. This neologism, coined by us, will forth be used for the first time in medical literature in this article.

Though similar idioms do exist, none have so far denoted this entity as an umbrella term. Having stated that, CIAHF transcends the most usual ICU related hemostatic such as: disseminated intravascular coagulopathy (DIC), bone marrow depression acquired thrombocytopenias and non-DIC clotting abnormalities, hence typifying a universal pattern in all of them due to the underlying critical illness which is the common denominator operating as an intrinsic driver of hemostatic failure [1,2].

Consequently, when challenged with CIAHF we suggest clinicians use an extended diagnostic

armamentarium including, but not limited to, the much forgotten test of the bleeding time (BT). We acknowledge BT is plagued with inter-operator variability, incomparable clinical reproducibility and certain technical and patient hindering factors.

However, notwithstanding all its shortcomings, the BT test has its precedents as it is readily accessible, suitable for almost any situation – especially in the ICU setting, affordable, promptly yielding results and can be adequately done by anyone from the ICU staff regardless of professional status.

The true edge of BT lies in its informational robustness as it communicates the functional condition of the thrombocytes, while simultaneously offering general insight into the clotting factor dependent branch of the coagulation cascade.

Moreover, BT has a straightforward and easy sway in qualitative platelet function estimation. For instance, if ordered hemostatic tests come back normal we can aptly use BT as a rule of thumb measure to reevaluate the diagnostic algorithm and rethink our tactics of the patient’s bleeding prophylaxis or overall treatment, for that matter. In that sense BT may be considered a tool of control when assessing the coherence of other hemostatic measurements thus revealing oversights

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and preventing any unpleasant surprises down the road when bleeding complications are concerned [3,4].

In the current array of advanced hemostasis tests BT fits competently as an add-on accessory of control suggesting to the clinician possible alternative pathological scenarios of the CIAHF, which can be of significant therapeutic value.

Sepsis, unidentified drug and herbal induced thrombopathies or acquired thrombasthenic traits due to multiple organ failure syndrome are just some of the disorders with preserved platelet count, giving us false pretense of normal hemostasis [5].

This is not an apologetic article for BT but rather an overarching manifesto in keeping our current practices in check and a reminder that in the myriad of tests at our disposal BT may add value, especially in the context of diversified hemostatic abnormalities in the ICU patient, for which we coined the hypernym - CIAHF, as it better portrays the coagulation manifestations of the critical illness.

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Conflicts of interest

There are no conflict of interest.

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