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APPENDIX

DISSEMINATED INTRAVASCULAR COAGULATION

Disseminated intravascular coagulation (DIC) is characterized as a systemic intravascular activation of coagulation, which is triggered by a clinical situation, leading to microvascular deposition of fibrin that can lead to organ dysfunction. The activation of coagulation may deplete platelets and coagulation factors leading to bleeding.

Causes	Sepsis/severe infection Malignancy Trauma Obstetrical (amniotic fluid embolism, abruptio placentae) Severe toxic or immunologic reactions <ul style="list-style-type: none">• Snake bites• Recreational drugs• Transfusion reactions/ABO-incompatible transfusion reaction• Transplant rejection• Vascular abnormalities (aortic aneurysm and Kaposiform hemangioendothelioma or Kasabach Merrit syndrome)• Severe hepatic failure Acute pancreatitis Acute promyelocytic leukemia Brain injury Severe burns Hypothermia/hyperthermia Fat emboli
Diagnosis	Severe thrombocytopenia Elevated fibrin markers (D-dimer, fibrin degradation products) Prolonged international normalized ratio or prothrombin time Fibrinogen level <1 g/L
Management	Treat underlying disorder Transfuse only for active bleeding Tranexamic acid if still significantly bleeding after trying blood components Heparin in selected circumstances LMWH as treatment for patients who develop thrombosis (acral ischemia) in the context of DIC and also as prophylaxis in those at risk of thrombosis but not bleeding Antithrombin (laboratory indices improved, mortality benefit unclear) Thrombomodulin

LMWH: low molecular weight heparin