All Bleeding Stops: Spotlight on Bleeding in Surgical Patients

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This year ASH again offered six Education Spotlight Sessions on topics amenable to lively case-based discussions concerning management of difficult issues. Yesterday's session on Bleeding in Surgical Patients continued in this rich tradition. Drs. Charles Abrams and Art Thompson led the session on surgical consultations to the hematology/coagulation service. A case of post-operative thrombocytopenia and a case of bleeding in a trauma patient were presented to spark discussion.

Dr. Abrams presented a case of thrombocytopenia in a patient following cardiac bypass. While this patient ultimately turned out to have heparin-induced thrombocytopenia (HIT) with thrombosis, other diagnostic considerations in the post-operative patient with low platelets were discussed, including the bypass pump platelet destruction, disseminated intravascular coagulation (DIC), and other drug-induced thrombocytopenias. The mechanisms of antibody production, platelet destruction, and thrombosis in HIT were presented, as were the options for alternative anticoagulants. The audience members weren't shy about chiming in, asking lively and difficult questions about the optimal duration of anticoagulation in HIT, the role of different IgG subclasses in the development of thrombosis, subsequent use of heparin for bypass in a patient with a history of HIT, the use of fondaparinux in HIT patients, the need for anticoagulation in the HIT patient without thrombosis, and the rationale for the warning against platelet transfusions in patients with HIT.

Dr. Thompson presented a case of a patient with massive trauma and a pelvic fracture. This patient had already received 12 units of packed red cells and was "diffusely oozing." Dr. Thompson posed questions to the audience about the diagnostic and therapeutic considerations in such a patient. While a clear consensus emerged that the patient probably needed platelet transfusions, the opinions rapidly diverged when considering next diagnostic and therapeutic steps. Some advocated the use of fresh frozen plasma, while others were clear in their preference for cryoprecipitate. Dr. Thompson mentioned data showing that consumption of platelets and fibrinogen was accelerated in patients undergoing even minor surgery, and advocated testing platelet counts and fibrinogen levels with transfusion of platelets and cryoprecipitate in bleeding trauma patients whose levels were low. He mentioned that further testing for DIC in such a patient was of less utility. He also reminded the audience about other therapeutic considerations, including correction of acidosis and hypothermia. The use of rVIIa in trauma was discussed, and audience members were referred to Dr. Keith Hoots' article on rVIIa off-label uses in the Education Program Book. Lastly, the pre-surgical approach to the anticoagulated patient or the patient on anti-platelet agents was presented.

The room was packed, and everyone seemed to have a favorite vignette or clinical conundrum to discuss, demonstrating the popularity of these trainee-friendly venues for case-based discussion and learning.

Attendees with an interest in coagulation are reminded to attend this afternoon's special session on hemostasis and thrombosis.