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TIPS ON HEPARIN-INDUCED THROMBOCYTOPENIA (HIT)

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The column in this issue is supplied by Dr. Kelty Baker, a hematologist in private practice at Houston Methodist. She is a Rice University graduate. Baylor College of Medicine was her home for medical school (Alpha Omega Alpha honors), medical residency, hematology fellowship, and seven years on the Baylor full-time academic staff before going into private practice. Her analysis of the importance of heparin-induced thrombocytopenia follows.

The diagnosis of heparin-induced thrombocytopenia can affect patients and their physicians in all medical specialties. It is one of the most litigated and costly complications that one can face. Hopefully, these 10 points to remember will be helpful to you and your patients.

1. Think of the diagnosis of heparin-induced thrombocytopenia (HIT) if the platelet count drops by 50% within 5 to 14 days of exposure to unfractionated or low-molecular-weight heparin.
2. Thrombocytopenia due to HIT can develop earlier than expected if the patient had any sort of exposure to heparin in the 100 days prior and still has circulating heparin antibodies.
3. Factors associated with the development of HIT are longer durations of heparin therapy, use of unfractionated heparin rather than low-molecular-weight heparin, female gender, and being a surgical rather than a medical patient.
4. Heparin antibodies are more likely to form in cardiac surgery patients than in orthopedic patients; however, antibody-positive orthopedic surgery patients are more likely to develop symptomatic thromboses than cardiac surgery patients.
5. HIT is one of the few prothrombotic states that can cause both venous and arterial thromboses.
6. If HIT is suspected, all forms of heparin exposure should be discontinued; e.g., heparin flushes, heparin-bonded catheters, and low-molecular-weight heparins.
7. Even if there is no apparent thrombosis, all patients with a diagnosis of HIT (and no contraindication to anticoagulation) should receive an alternative anticoagulant such as fondaparinux, argatroban, or bivalirudin.
8. Transitioning to warfarin from an alternative anticoagulant should not start until the platelet count reaches 150,000/microliter, and the initial doses chosen should be < 5 mg/day.
9. Platelet transfusions are relatively contraindicated in HIT since they can precipitate thrombotic complications.
10. Placement of IVC filters in patients with HIT can be problematic as they may worsen preexisting deep venous thromboses and precipitate venous limb gangrene (phlegmasia cerulea dolens).