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Pharmacist's Letter
Hospital

Guide Best Treatment for Heparin-Induced Thrombocytopenia

You can help improve **anticoagulation stewardship for heparin-induced thrombocytopenia (HIT)**.

We see it time and again. Platelets drop...platelet factor 4/heparin antibodies are ordered...and heparin products are reflexively replaced by therapeutic doses of non-heparins.

But many of these patients don't have HIT...and exposing them to HIT treatment can increase bleeding risk and drive up cost.

Work with hematology and lab colleagues to develop a HIT protocol if you don't have one in place already.

For example, require calculating a 4Ts score before antibodies can be ordered...and build criteria or a score calculator into your EHR.

Don't order antibodies or treat HIT in patients at low risk (4Ts score 0 to 3)...except in select patients, such as those on extracorporeal membrane oxygenation (ECMO).

But for patients with intermediate (4Ts score 4 to 5) or high risk (6 to 8), ensure all heparin is stopped, including flushes.

Document heparin as an allergy in the EHR. Plan to remove it if antibody results are negative...or add the date for positive results.

Start therapeutic-dose anticoagulation right away...evidence suggests 50% of untreated patients with HIT will develop thrombosis.

Lean toward starting with a direct thrombin inhibitor (DTI), argatroban or bivalirudin...especially for critically ill patients or those needing a short-acting agent.

Consider bivalirudin for those needing cardiac intervention. Reduce initial infusion rates for those with kidney impairment.

Generally save initial HIT treatment with subcutaneous fondaparinux or DOACs for more stable patients. But avoid DOACs in those with mechanical heart valves.

When DOACs are used, lean toward apixaban or rivaroxaban for the most data. But overall evidence is limited, and many studies used DOACs after several days of a parenteral non-heparin.

Be aware, warfarin is still an option AFTER platelets recover, usually 150,000/mm^3 or more...especially if DOAC cost is an issue.

Overlap warfarin with a parenteral non-heparin. But keep in mind that DTIs, especially argatroban, falsely elevate the INR.

Treat HIT patients with thrombosis for 3 months. But generally limit to 4 weeks for HIT without a clot...as long as platelets have recovered to at least 150,000/mm^3.

For patients with refractory or spontaneous HIT, don't be surprised if specialists try IVIG or plasmapheresis.

See our chart, *Heparin-Induced Thrombocytopenia*, for dosing and duration, diagnosing HIT, and more.

Key References:

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-Cuker A, Arepally GM, Chong BH, et al. American Society of Hematology 2018 guidelines for management of venous thromboembolism: heparin-induced thrombocytopenia. Blood Adv. 2018 Nov 27;2(22):3360-3392.
-Arachchillage DJ, Thachil J, Anderson JAM, et al. Diagnosis and management of heparin-induced thrombocytopenia: Third edition. Br J Haematol. 2024 Feb;204(2):459-475.
-Cogan JC, McFarland MM, May JE, Lim MY. Quality improvement approaches to heparin-induced thrombocytopenia: a scoping review. Res Pract Thromb Haemost. 2023 Oct 13;7(7):102219.
-Choi PY, Uzun G, Bakchoul T; SSC Platelet Immunology of the ISTH. Results of an international survey of opinions on the definitions and treatments for heparin-induced thrombocytopenia: communication from the ISTH SSC Subcommittee on Platelet Immunology. J Thromb Haemost. 2024 Jan 30:S1538-7836(24)00053-9. doi: 10.1016/j.jtha.2024.01.014. Epub ahead of print.

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