Indiscriminately ordering blood tests for rare heparin reaction can lead to patient harm and increased costs

Testing for rare heparin reaction is unnecessary for most cases and can be potentially harmful and lead to increased costs, according to an article published in JAMA Internal Medicine.

Heparin is a common blood thinner used in hospitals to prevent and treat blood clots in the legs and lungs. Heparin can very rarely cause a reaction called 'heparin induced thrombocytopenia' or HIT, leading to decrease in number of platelets and blood clot formation. Physicians aware of this rare side effect can test for it to detect it early and prevent devastating complications. However, this reaction occurs in only 0.1 to 5% of patients, and the screening tests are notoriously unreliable. False positive results on these screening tests can cause unfavorable consequences for the patient.

Abhishek Maiti, MBBS, from the University of Texas Health Science Center at Houston, and colleagues describe a case of a patient who developed low platelet count from infection, however it was attributed to this rare heparin reaction. The testing for this heparin reaction came back falsely positive which led to a cascade of events which led to the patient having bleeding, and transfusion of blood products. Fortunately, the patient made a full recovery, and was discharged home a few days later.

The authors urge other physicians to be more thoughtful while considering this rare reaction to blood thinners and to be more cautious about ordering these tests. There are excellent scoring systems developed to check probability of this rare condition, and can help rule out majority of cases without having to resort to expensive testing. The authors conclude that "As physicians, we need to remember that indiscriminate testing for HIT, even though well-intentioned, can lead to unfavorable outcomes."

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Publication

Indiscriminate Testing for Heparin-Induced Thrombocytopenia: A Teachable Moment.
Maiti A, Short NJ, Kroll MH
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