BIVALIRUDIN FOR THE TREATMENT OF HEPARIN-INDUCED THROMBOCYTOPENIA: A 9 YEAR, 461 PATIENT EXPERIENCE

Oral Contributions
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Background: Heparin-induced thrombocytopenia (HIT) is an adverse immune-mediated response to unfractionated heparin and less commonly low molecular weight heparin. It is associated with a high risk for thrombotic events and potential for limb and life-threatening complications. The only approved and currently available anticoagulant for the prevention and treatment of HIT in the United States is argatroban. We review our experience with bivalirudin as an alternative agent for the treatment of HIT.

Objectives: To report the safety and efficacy outcomes with bivalirudin in patients with suspected, confirmed or previous history of HIT.

Methods: We performed a retrospective chart review from our registry of patients with suspected, confirmed or a previous history of HIT who received bivalirudin for anticoagulation in a single center over a 9 year period.

Results: We identified 461 patients who received bivalirudin: 220 (47.7%) were surgical, and 241 (52.3%) were medical patients. Of this population, 107 (23.2%) were considered critically ill, and 109 (23.6%) were dialysis-dependent. Suspected, confirmed and a previous history of HIT were reported in 262, 124 and 75 patients respectively. Of 386 patients with suspected or confirmed HIT, 223 patients (57.8%) had thrombosis at the time of diagnosis. New thrombosis was identified in 21 patients (4.6%) while on treatment with therapeutic doses of bivalirudin. No patient required HIT-related amputation. Major bleeding events occurred in 35 patients (7.6%). We found a significant increase in major bleeding risk in the critically ill population (13.1%; OR 2.4, 95% CI 1.2-4.9, p=0.014). The 30 day all-cause mortality rate was 14.5% (67 patients), and 8 out of 67 (1.7%) deaths were felt to be HIT-related.

Conclusion: Bivalirudin is an effective and safe alternative option for the treatment of patients with HIT.