Incidence of heparin-induced thrombocytopenia type II and postoperative recovery of platelet count in liver graft recipients: a retrospective cohort analysis.

Abstract:
Thrombocytopenia in patients with end-stage liver disease is a common disorder caused mainly by portal hypertension, low levels of thrombopoietin, and endotoxemia. The impact of immune-mediated heparin-induced thrombocytopenia type II (HIT type II) as a cause of thrombocytopenia after liver transplantation is not yet understood, with few literature citations reporting contradictory results. The aim of our study was to demonstrate the perioperative course of thrombocytopenia after liver transplantation and determine the occurrence of clinical HIT type II. We retrospectively evaluated the medical records of 205 consecutive adult patients who underwent full-size liver transplantation between January 2006 and December 2010 due to end-stage or malignant liver disease. Preoperative platelet count, postoperative course of platelets, and clinical signs of HIT type II were analyzed. A total of 155 (75.6%) of 205 patients had thrombocytopenia before transplantation, significantly influenced by Model of End-Stage Liver Disease score and liver cirrhosis. The platelet count exceeded 100,000/µL in most of the patients (n = 193) at a medium of 7 d. Regarding HIT II, there were four (1.95%) patients with a background of HIT type II. The incidence of HIT in patients with end-stage hepatic failure...
is, with about 1.95%, rare. For further reduction of HIT type II, the use of intravenous heparin should be avoided and the prophylactic anticoagulation should be performed with low-molecular-weight heparin after normalization of platelet count.