

# Gastrointestinal Bleeding and Heparin-Induced Thrombocytopenia in Pediatrics

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## Editorial Note

Pediatrics refers to the medical diagnostics and treatments of the infants till grown up age which differs from country to country. In general, medical attention to the infants and the children are majorly considered under pediatrics. Presently the subject contains several sub disciplines including general aspects of pediatrics, pediatric cardiology, neurology, gastroenterology, hematology, nephrology, endocrinology, neonatal and adolescent medicine, oncology, neonatal and prenatal ethical considerations etc. Concerns in pediatric issues require input from scientific communities for a better and healthy world.

The Journal of Pediatric care aims to distribute information on all scientific ground and social aspects related to pediatric issues and neonatal care. The journal of Pediatric Care will consider articles in the form of a research article, review article, short communications, case studies etc. bearing novel and valuable information for publication. The broader scope of the journal will consider submissions in the following areas: pediatric medicine, neonatal care, medicinal aspect of behavior development, care in neonatal intensive care unit, social care of infants and children and their impact on the behaviour etc.

A recent article entitled "What's New in Preventing Pediatric Gastrointestinal Bleeding in Critically Ill Patients?" by Vergara et al [1] reveals that bleeding from stress-related gastrointestinal mucosa disease in critical patients remains a major clinical management problem in the intensive care unit in both adults and pediatrics. Although the incidence is low (1%-6%), a substantial proportion presents clinical risk factors (such as mechanical ventilation greater than 48 hours and coagulopathies) that predict an increased risk of bleeding. In addition, we can find lesions of the gastrointestinal mucosa in up to 75 to 100% of patients in the ICU.

Although rare, stress ulcer bleeding is a serious complication with an estimated high mortality of 40 to 50%, mainly due to decompensation of an underlying condition or multi-organ failure. Although the majority of ICU patients receive stress ulcer prophylaxis, mainly with IBP, there is some controversy surrounding its efficacy and safety. Indeed, no individual trial has shown that stress ulcer prophylaxis reduces mortality. Some reports suggest that the use of IBP increases the risk of

nosocomial infections. However, several meta-analyses and cost-effectiveness studies suggest that IBP are clinically more effective and cost-effective than histamine-2 receptor antagonists (H2RA), without considerable increases in nosocomial pneumonia [2]. In pediatrics gastrointestinal hemorrhages are described in up to 10% of the complications in patients with critical illness of these 1.6% are significant hemorrhages, of these are associated with risk factors such as respiratory failure, coagulopathy or PRISM score >10, with incidences probably even older in neonatal ICUs [3].

Another article entitled "Heparin-Induced Thrombocytopenia in Pediatrics Mini Review" by Vergara et al [1] declares that The use of heparin has a potential risk of developing heparin-induced thrombocytopenia, which, although infrequent, is of great importance due to high morbidity and mortality that requires rapid diagnosis and timely treatment. A clinical case of a patient with dilated cardiomyopathy, with extracorporeal support is described, which is anticoagulated with heparin by protocol, presenting an adverse effect little reported in the literature such as heparin-induced thrombocytopenia requiring Fondaparinux with failure to start bivalirudin.

Heparin is a medicine widely used in pediatrics as well as in adults for prophylaxis and treatment of thromboembolism, maintenance of permanent arterial and venous cannulas, cardiac catheterization cardiopulmonary bypass, extracorporeal membrane oxygenation, dialysis, anticoagulation in special cases such as deficiency of S protein and cases of antiphospholipid this drug is an anticoagulant have a potential risk of developing heparin-induced thrombocytopenia [4,5].

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