Heparin-induced thrombocytopenia type II in an infant with a congenital heart defect--anticoagulation during cardiopulmonary bypass with epoprostenol sodium and heparin.

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Background
Heparin-induced thrombocytopenia type II (HIT II) is a rare but potentially life-threatening complication of heparin therapy. Hitherto, only few reports on HIT II in infants and children have been published. In particular, infants and children who have to be operated under cardiopulmonary bypass are at risk as an alternative anticoagulation is required.

Case Presentation
We report on an infant with a congenital heart defect who was scheduled for cardiac surgery (Damus Kaye-Stansel procedure) with cardiopulmonary bypass. In the intensive care unit, an HIT II was diagnosed. Before surgery, the infant was pretreated with epoprostenol sodium (incrementally increasing up to a maximum dose of 30 ng/kg/min) before heparin was administered shortly after sternotomy. Mean arterial pressure was kept stable with an infusion of norepinephrine and the course of the cardiopulmonary bypass showed no signs of thrombosis. Drainage loss in the postoperative period was moderate.

Conclusion
In HIT II infants, pretreatment with epoprostenol sodium before reexposure to heparin may offer a safe and effective anticoagulation for cardiopulmonary bypass.