Comparison of blood-sparing efficacy of 8-aminocaproic acid and tranexamic acid in newborns undergoing cardiac surgery.

Abstract:
8-Aminocaproic acid (EACA) and tranexamic acid (TXA) are used for antifibrinolytic therapy in neonates undergoing cardiac surgery, although data directly comparing their blood-sparing efficacy are not yet available. We compared two consecutive cohorts of neonates for the effect of these two medications on perioperative blood loss and allogeneic transfusions. Data from the EACA group (n = 77) were collected over a 12-month period; data from the tranexamic acid group (n = 28) were collected over a 5-month period. Blood loss, rate of reoperation due to bleeding, and transfusion requirements were measured. There was no significant difference in blood loss at 6 hours (EACA 24 [17-30] mL/kg [median (interquartile range)] vs. TXA 20 [11-34] mL/kg, P = 0.491), at 12 hours (EACA 31 [22-38] mL/kg vs. TXA 27 [19-43] mL/kg, P = 0.496) or at 24 hours postoperatively (EACA 41 [31-47] mL/kg vs. TXA 39 [27-60] mL/kg; P = 0.625) or transfusion of blood products. 8-Aminocaproic acid and tranexamic acid are equally effective with respect to perioperative blood loss and transfusion requirements in newborns undergoing cardiac surgery.