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One dose of tranexamic acid is safe and effective in revision knee arthroplasty.

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ABSTRACT: Revision total knee arthroplasty (TKA) has been associated with an increased risk of perioperative blood loss. Tranexamic acid (TXA) has been proven to be safe and effective in preventing blood loss in primary TKA. The purpose of this study was to evaluate the effect of TXA on blood loss and transfusion rates in revision TKA. We performed a retrospective comparative study on 424 patients who had undergone revision TKA between January 2006 and March 2010. A total of 178 patients did not receive TXA while 246 patients received one intraoperative dose of 20mg/kg of TXA given prior to tourniquet release. There was a significant reduction in hemoglobin loss (42±16g/L vs 38±15g/L, P=0.005), transfusion rates (30.3% vs 16.7%, P=0.001) and average amount transfused (1.1±1.9units vs 0.5±1.1units, P=0.001) in the TXA group. There was no significant difference in recorded major adverse events with the administration of TXA.