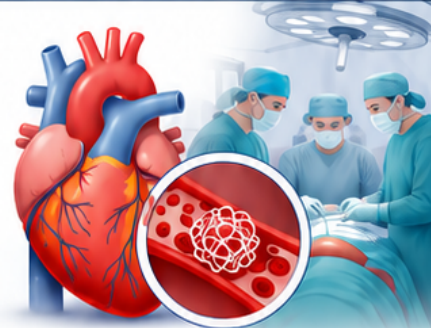


TXA in CABG:

Triple Bolus vs Continuous Infusion

What this prospective study suggests about bleeding control in isolated CABG

Uzundere O, Yargı M, Topalel S, et al. J Cardiothorac Surg. 2026



WHY IT MATTERS

Perioperative bleeding remains a major challenge in CABG. Tranexamic acid (TXA) is recommended, but the optimal dosing strategy is still uncertain.



Protect the heart



Reduce bleeding



Support safer surgery



STUDY SNAPSHOT

- Prospective observational study
- Single centre
- 93 adults undergoing elective isolated CABG
- **Group 1:** Triple-dose IV bolus TXA (n=53)
- **Group 2:** IV bolus + continuous infusion TXA (n=40)
- **Primary outcome:** postoperative bleeding



TXA REGIMENS

TRIPLE BOLUS (Group 1)



10 mg/kg after induction + during CPB + after protamine (~30 mg/kg total)

VS

BOLUS + INFUSION (Group 2)



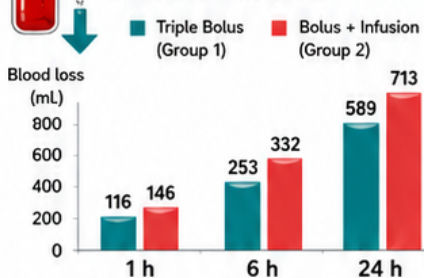
10 mg/kg bolus then 2 mg/kg/h for 8 h (~26 mg/kg total)

THREE KEY POINTS

1

Less postoperative bleeding

Triple-dose bolus TXA showed lower bleeding at every measured time point.

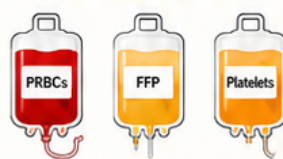


★ Largest difference at 6 h:
~24% lower bleeding (p=0.03)

2

No clear transfusion advantage

Despite lower bleeding, transfusion needs were similar between groups in the first 24 h.



PRBCs: p=0.85
FFP: p=0.55
Platelets: p=0.98

3

Reassuring safety profile

No postoperative seizures or thromboembolic events were observed in either group.



Reoperation due to bleeding:
0 vs 3 patients (trend favoring triple bolus).

Late mortality: 0 vs 1.



CLINICIAN TAKEAWAY

In elective isolated CABG, a triple-dose IV bolus TXA regimen may be a practical and safe alternative to bolus plus infusion, with lower postoperative bleeding and no signal of increased complications in this study.

✓ Transfusion rates and length of stay were not significantly different.



WHAT NEEDS TO HAPPEN NEXT?



Randomized multicentre trials to confirm effectiveness



Precise dose-tracking to clarify dose-response relationships



Testing in broader cardiac surgery populations, including off-pump CABG and higher-risk patients

i This was a non-randomized, single-centre study with a modest sample size.



BOTTOM LINE: Repeated intraoperative TXA boluses may improve bleeding control after CABG, but stronger comparative evidence is still needed.