Effects of TXA on death, vascular occlusive events, and blood transfusions in trauma patients with significant haemorrhage (CRASH-2): a randomized, placebo-controlled trial

CRASH-2 Trial Collaborators

CRASH-2 Trial

MVP INFGRAPHIC SERIES

BACKGROUND

- Tranexamic acid (TXA) can reduce bleeding in patients undergoing elective surgery
- Homeostatic responses to surgery and trauma are similar
- TXA reduced the need for blood transfusions by 1/3 in elective surgeries

SHOULD TXA BE CONSIDERED IN THE BLEEDING TRAUMA PATIENT?

METHODS

RANDOMIZED PLACEBO CONTROL TRIAL

- 40 countries
- 274 hospitals
- 20,211 patients

RESULTS

DISCUSSION

- TXA significantly reduced the need for blood transfusions
- TXA does not increase risk of vascular occlusive events
- Early TXA can reduce the risk of death from hemorrhage
- TXA significantly reduces all cause mortality

LIMITATIONS

- Limited insight into mechanism of action of TXA in the bleeding trauma patient
- Most blood loss occurs pre-hospital & is difficult to measure
- Competing risk - patients that survived have a greater opportunity to receive a blood transfusion
- Some patients may have not been bleeding at time of randomization

REFERENCES: