Tranexamic acid Intravenous for Adults



Who can administer

May be administered by registered competent doctor or nurse/midwife

Available preparations

Cyklokapron 500mg per 5ml ampoule

Reconstitution

Already in solution

Draw up using a 5 micron filter needle

Infusion fluids

Sodium chloride 0.9% or Glucose 5%

Methods of intravenous administration

Intravenous infusion (unlicensed BUT preferred due to safety concerns due to risk of rapid administration with alternative routes) $^{(ref \, 1,6)}$

• Add required dose to a convenient volume and give over at least ten minutes e.g. 100ml sodium chloride 0.9% over 10 minutes

Slow intravenous injection (caution: recommendation of max 100mg/minute makes this route impractical)

- Administer required dose at a rate of 1ml per minute (100mg per minute) to minimise harm
- Rapid intravenous injection may cause malaise and hypotension, with or without loss of consciousness (ref 1)

Dose in adults

Standard treatment of local fibrinolysis:

- Give 0.5 to 1g two to three times daily
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug Reactions

Standard treatment of general fibrinolysis:

- Give 1g every six to eight hours, equivalent to 15mg per kg body weight
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug Reactions

Significant haemorrhage following trauma (unlicensed indication) (ref 2,3)

- Give a 1g dose over 10 minutes, followed by 1g as an intravenous infusion over eight hours
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug

Reactions

• Do not use intravenous tranexamic acid more than 3 hours after injury in patients with major trauma unless there is evidence of hyperfibrinolysis^(ref 2)

Neutralisation of thrombolytic therapy (ref 4)

- Give 10mg per kg
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug Reactions

Disseminated intravascular coagulation (DIC) (ref 4)

- Tranexamic acid should only be used in the treatment of DIC when the condition is predominantly due to disturbances in fibrinolytic mechanisms, not with predominant activation of the coagulation system
- A single dose of 1g tranexamic acid is frequently sufficient to control bleeding
- Administration of tranexamic acid in DIC should be considered only when appropriate haematological laboratory facilities and expertise are available
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug Reactions

Post-partum haemorrhage (unlicensed indication) (ref 7)

- Give 1g dose within 3 hours of birth
- May give a second dose of 1g if bleeding continues after 30 minutes
- Important: Maximum rate of administration is 1g over 10 minutes- to avoid Adverse Drug Reactions

Renal impairment (ref 5)		
GFR (ml per minute/1.73m2)	Dose	Frequency
20 to 50	10mg/kg	every 12 hours
10 to 20	10mg/kg	every 24 hours
less than 10	5mg/kg	every 24 hours

Storage

Store below 25°C

References

SPC February 2020

- 1: Injectable medicines guide Medusa downloaded 20/01/2022
- 2: NICE 2016 NG39 Major trauma: assessment and initial management
- 3: UptoDate -accessed online 20/01/2022
- 4: Martindale accessed online 20/01/2022
- 5: Renal Drug database accessed online 20/01/2022
- 6. Conversations with Drs Gilmore and Cosgrave. 18 April 2024. (Peter Kidd).
- 7. Updated WHO recommendation on tranexamic acid for the treatment of post-partum haemorrhage, October 2017

Therapeutic classification

Antifibrinolytic drug