Hydroxycobalamin Intravenous Infusion for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Antidote for Cyanide poisoning - please consult TOXBASE or NPIC for further information

Available preparations

CyanokitÂ 5g vial

Reconstitution

- Using the sterile transfer device enclosed, reconstitute with 200mL Sodium Chloride 0.9%Â (to the redÂ line marked on the vial)
- The vial should be rocked or inverted for at least 1 minute to mix the solution, but it must not be shaken (as shaking the vial may cause foaming)
- Use enclosed infusion set for administration (includes an appropriate filter). This is because the reconstituted solution is dark red and some insoluble particles may not be seen

Infusion fluids

Sodium Chloride 0.9% preferred (and also see Further Information)

Methods of intravenous administration

First 5g dose: Slow intravenousÂ infusion over 15 minutes

Second 5g dose (if used): Slow intravenousÂ infusion over 15 minutesÂ toÂ 2 hours (duration dictatedÂ byÂ severity of patient's symptoms)

Dose in adults

Cyanide poisoning

- Initial dose: 5g
- Subsequent dose: Depending upon the severity of the poisoning and the clincial response, a second dose of 5g may be administered.

Renal impairment

- No dose adjustment required

Hepatic impairment

- No dose adjustment required

Monitoring

- Renal function should be monitored until 7 days after treatment
- Monitor blood pressure (risk of hypertension)

Further information

- As hydroxocobalamin is red and water soluble, transient red discolouration of skin and mucous membranes can be expected for up to 15 days; urine may be discoloured for up to 35 days [ref 1]. The discolouration may interfer with some biochemical analyses - caution is required when interpreting laboratory results for up to 48 hours after administration. It may also interfere with all urine colorimetric parameters. See SPC for further information
- Because of it's deep red colour, hydroxocobalamin may cause haemodialysis machines to shut down (due to an erroneous detection of a 'blood leak') until it is eliminated from the blood (at least 5.5 to 6.5 days[ref 2])
- Limited stock held at UHG (total of two 5g vials) - please contact Pharmacy immediately if further stock needed
- Glucose 5% may be used for reconstitution only if Sodium Chloride 0.9% is unavailable or unsuitable

Storage

Store below 25^{0}C

References

UK SPC April 2018 (checked May 2025- no update to SPC)

1. TOXBASE accessed 07/05/2025
2. Package insert accessed online EMEA website 08/05/2025

Therapeutic classification

Emergency treatment of poisoning