Doxycycline hyclate Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- **Unlicensed** preparation - rarely used by the intravenous route
- Intravenous use is associated with local irritation and may cause **thrombophlebitis**, therefore, IV therapy should be **switched to PO as soon as possible**.
- Avoid in pregnancy and breastfeeding

Available preparations

Doxycyclin-ratiopharm 100mg 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

Intermittent intravenous infusion - preferred method due to risk of thrombophlebitis (ref 1)

Dose of 100mg	Dose of 200mg
Give **100mg** in at least 100ml over 1 to 4 hours	Give **200mg** in at least 250ml over 2 to 4 hours

Slow intravenous injection - 100mg only and where INFUSION is not possible

- Administer dose over at least 2 minutes (not to exceed 50mg per minute)
- A slower rate of injection of at least 3 minutes is required for elderly, frail, critically ill and patients with **cardiac arrhythmias**
- The **rate of administration is important**. If the injection is administered too quickly it may cause vertigo, sensation of heat, facial flushing and collapse
- May cause thrombophlebitis

Dose in adults

Usual dose

- Give 200mg on day 1, then...
- Give 100 once or twice daily, **or** 200mg once daily - depending on the infection being treated, and the severity of the infection (ref 2)

Hepatic impairment

- Use with caution in hepatic impairment

Renal impairment

- **Oral administration is preferred** in patients with severely impaired renal function (due to risk of accumulation of povidone solvent).
- Otherwise, no dosage adjustment is necessary

Monitoring

- Monitor renal and hepatic function during treatment (especially during prolonged courses of treatment.)

Further information

- Intravenous infusion is the preferred method of administration, due to the risk of thrombophlebitis
- Contraindicated in myasthenia gravis - risk of neuromuscular block (due to the magnesium content)

Storage

- Protect mixed infusion solution from direct sunlight
- Store between 2 and 8^{0}C

References

1. Injectable medicines administration guide Medusa, downloaded 19/06/2025

Therapeutic classification

Antibiotic - tetracycline