Levofloxacin Intravenous for Adults

Who can administer

May be administered by registered competent doctor or nurse/midwife

Important information

- Red-light antimicrobial: Requires pre-authorisation from Microbiology or ID prior to use 24 hours/7 days a week (exception: where indicated for community acquired pneumonia and H. Pylori in GUH guidelines
- **If a glass bottle presentation: Glass bottles must be vented** in one of two ways (ref 1)
    - Directly by means of a filter needle into the bottle which goes through the rubber stopper and opens into the air, or
    - Direct air vent on the air inlet of the administration set, located between the drip chamber and piercing pin, it is covered with a bacterial retentive filter to reduce the chance of contamination
- Consider **intravenous to oral** switch as soon as possible as excellent bioavailability - see further information
- There are numerous important **interactions** - check BNF
- Cautions
    - Quinolones may be associated with side effects relating to musculoskeletal, peripheral and central nervous systems, some of which may be serious, disabling and potentially permanent.
    - **Quinolones should be used with special caution in the elderly, patients with kidney disease, those who have had an organ transplantation or in patients being treated concomitantly with corticosteroids. These patients are at a higher risk of tendon injury.**
    - Patients should be informed of the risks and advised to stop treatment and contact prescriber if they experience pain or swelling in tendons / joints /muscle or neuropathy
    - Fluoroquinolones can cause psychiatric side-effects, including depression and psychosis, even after the first dose (ref BNF)
- See under 'Dose' for adjustments required in **renal impairment**

Available preparations

Levofloxacin 500mg in 100mL

Reconstitution

Already in solution

Infusion fluids

Not required - product ready for infusion

Methods of intravenous administration

Intermittent intravenous infusion

- Administer 500mg over at least 60 minutes (at least 30 minutes for 250mg dose)

Dose in adults

Usual dose (in community acquired pneumonia)

- Give 500mg every twelve hours (as recommended by GUH microbiology guidelines)

Renal impairment

eGFR (mL per minute/1.73m^2)	Dose to use in community acquired pneumonia
20 to 50	500mg stat, then 250mg twice daily
10 to 19	500mg stat, then 125mg twice daily
less than 10	500mg stat, then 125mg once daily
Renal replacement therapy	Consult specialist sources or pharmacy

Hepatic impairment

- No dose adjustment is required

Further information

- The oral dose is the same as the IV dose
- Use with caution where predisposition to QT interval prolongation (including cardiac disease, congenital long QT syndrome, electrolyte disturbances, concomitant use with other drugs known to prolong QT interval (e.g.amiodarone), elderly patients)
- Contraindicated in patients with a history of epilepsy

Storage

Store below 25^{0}C

References

Levofloxacin (Noridem)SPC July 2024

1. "IV Solution Containers". (link below)

Therapeutic classification

Quinolone antibiotic