FLUCLOXACILLIN

Read in conjunction with Disclaimer

Formulary: Unrestricted	
Presentation	**Oral suspension:** 250 mg/5 mL = **50 mg/mL** **Vial:** 500 mg, 1000 mg
Classification	Narrow spectrum penicillin antibacterial
Indication	Treatment of *staphylococcal* infections
Special Considerations	• Contraindicated for patients with hypersensitivity to penicillin. • Use with caution in patients with renal and hepatic impairment. • Use with caution in jaundiced or preterm infants as flucloxacillin can displace bilirubin from albumin. • 1000 mg of flucloxacillin contains 2.2 mmol of sodium. • There have been reports of severe, delayed cholestatic jaundice in adults particularly after treatment for more than 2 weeks. While this has not been recognised with neonatal use, caution would be recommended in this population.
Monitoring	• Electrolytes. • Observe intravenous site for extravasation. • Liver function tests if on long term therapy (greater than 14 days).
Compatibility	**Fluids:** Sodium chloride 0.9%, glucose 5%. Refer to KEMH Neonatal Medication Guideline: Y-Site IV Compatibility in Neonates
Incompatibility	Aminoglycosides, including gentamicin, should not be mixed with flucloxacillin when both drugs are given parenterally as inactivation occurs. Ensure line is adequately flushed between antibiotics.
Adverse Effects	**Common:** Diarrhoea and gastrointestinal upset (particularly with oral), pain and inflammation at injection site, transient increases in liver enzymes and bilirubin.
	Rare: Electrolyte disturbances (particularly hypokalaemia), neurotoxicity, bleeding, blood dyscrasias, hepatitis and cholestatic jaundice (especially in extended treatment).
Storage & Stability	**Oral suspension:** Store at room temperature, below 25°C. Protect from light. • **After reconstitution:** Refrigerate at 2 to 8°C, do not freeze. Discard 14 days after opening. **Vial:** Store at room temperature, below 25°C. Protect from light.

ORAL

Presentation (for oral use)	**Oral suspension:** 250 mg/5 mL = **50 mg/mL**
Dosage	**Oral:** **Postnatal Age** / **Dose** / **Frequency** Less than 7 days / 25 mg/kg/dose / Every 12 hours 7 to 20 days / 25 mg/kg/dose / Every 8 hours 21 days or greater / 25 mg/kg/dose / Every 6 hours
Dose Adjustment	**Renal impairment:** Dose adjustment may be required in severe renal impairment.
Preparation	***Note:*** *Check brand before reconstituting mixture as instructions may differ****.*** **Reconstitution for Flucil® brand:** • Add 58 mL of sterile water to the flucloxacillin powder for suspension. *Concentration now equal to* **50 mg/mL**
Administration	• Shake well before use. • Draw prescribed dose into oral/enteral syringe. • Can be given Oral/OGT/NGT. • Give on an empty stomach, 30 minutes before a feed to improve absorption.

INTRAVENOUS

Presentation (for IV use)	**Vial:** 500 mg, 1000 mg ***Available from CIVAS (KEMH Only):*** *50 mg/mL*
Dosage	**IV:** **Postnatal Age** / **Dose** / **Frequency** Less than 7 days / 50 mg/kg/dose / Every 12 hours 7 to 20 days / 50 mg/kg/dose / Every 8 hours 21 days or greater / 50 mg/kg/dose / Every 6 hours **Doses up to 100 mg/kg/dose may be used in staphylococcal osteomyelitis, meningitis or cerebral abscess.**
Dose Adjustment	**Renal impairment:** Dose adjustment may be required in severe renal impairment.
Preparation **500 mg vial**	**Vial**: 500 mg (powder displacement = 0.4 mL) **Step 1 Reconstitution:** • Add 4.6 mL of water for injection to the **500 mg** flucloxacillin vial. **Step 2 Dilution:** • Draw up 5 mL (500 mg) and make up to 10 mL total volume with compatible fluid. *Concentration now equal to* **50 mg/mL**

INTRAVENOUS

Preparation
1000 mg vial

Vial: 1000 mg (powder displacement = 0.7 mL)

Step 1 Reconstitution:

- Add 4.3 mL of water for injection to the **1000 mg** flucloxacillin vial.

Step 2 Dilution:

- Draw up 2.5 mL (500 mg) and make up to 10 mL total volume with compatible fluid.

Concentration now equal to **50 mg/mL**

Administration

IV infusion (preferred):

- Infuse via syringe driver pump over 30 to 60 minutes.

IV push:

May be given as an IV injection over 3 to 5 minutes however infusion is preferred due to increased risk of phlebitis and pain.

- IV Injection over 3 to 5 minutes.

INTRAMUSCULAR

Presentation

Vial: 500 mg, 1000 mg

Available from CIVAS (KEMH Only): *200 mg/mL*

Dosage

IM:

Postnatal Age	Dose	Frequency
Less than 7 days	50 mg/kg/dose	Every 12 hours
7 to 20 days	50 mg/kg/dose	Every 8 hours
21 days or greater	50 mg/kg/dose	Every 6 hours

Dose Adjustment

Renal impairment: Dose adjustment may be required in severe renal impairment.

Preparation
500 mg vial

Vial: 500 mg (powder displacement = 0.4 mL)

Reconstitution:

- Add 2.1 mL of water for injection or lidocaine 1% to the **500 mg** flucloxacillin vial.

Concentration now equal to **200 mg/mL**

Preparation
1000 mg vial

Vial: 1000 mg (powder displacement = 0.7 mL)

Reconstitution:

- Add 4.3 mL of water for injection or lidocaine 1% to the **1000 mg** flucloxacillin vial.

Concentration now equal to **200 mg/mL**

Administration

- Only use IM route if IV not available, IM route is painful.
- Draw up the prescribed dose.
- Inject as per the Medication Administration Guideline.
- *Do not administer lidocaine (lignocaine) containing solutions intravenously.*

Related Policies, Procedures, and Guidelines

Clinical Practice Guidelines:

CAHS Sepsis: Neonatal

Pharmaceutical and Medicines Management Guidelines:

CAHS Neonatology – Medication Administration Guideline

WNHS Cold Chain Management for Medications and Vaccines

CAHS Medication Refrigerators and Freezers

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