

Who can administer

May be administered by registered competent doctor or nurse/midwife

Prescription must be initiated by consultant/registrar neurologist

Important information

- Must be prescribed by a **consultant neurologist or Registrar neurologist**
- **Drug name must be written in full - no abbreviations**, as experience shows that attempts to do so increase the risk of serious error
- **Unlicensed medicine**
- **Drug interactions** - several important and serious interactions (e.g. Serotonin agonists, MAOI, triptans, potent CYP3A4 inhibitors e.g. clarithromycin) **see ref** Use [interaction checker](#) if required

Available preparations

Dihydroergotamine (DHE) Mesylate Injection USP 1mg in 1ml (unlicensed)

Reconstitution

Already in solution for injection

Infusion fluids

Sodium chloride 0.9%

Methods of intravenous administration

Intermittent intravenous infusion (locally preferred route - off-label)^(ref 5)

- Add required dose to 250mL infusion fluid and administer over one hour

Slow intravenous injection^(ref 1,2)

- Administer required dose over 1 to 2 minutes

Dose in adults

Migraine, cluster headache^(ref 1)

- Give 1mg at first sign of headache; repeat once in ONE hour if required.
- Maximum is 2mg in 24 hours and/or 6mg in 1 week (licensed in other countries)^(ref 2)
- There are protocols that allow for higher total weekly doses, e.g. 8mg or 11mg^(ref 4,5)
- Local expert opinion: max 8mg per week^(ref 4,5)

Intractable migraine (status migrainosus; >72 hours)^(ref 2)

- Raskin protocol (off-label dosing):
- 1. Pre-medicate with ondansetron 4mg IV every eight hours, given at least 30 minutes before each

dihydroergotamine dose or alternative **anti-emetic** (where not contraindicated)

- 2. Give 0.5mg dihydroergotamine
- 3. Titrate to a range of 0.2 to 1mg every 8 hours for 2 to 3 days - see Table 1 below for an example of dose titration
 - Generally, a **maximum daily dose of 2mg** should not be exceeded, without consultant input
 - Local expert opinion: max 8mg per week ^(ref 4,5)

Table 1: Example of dose titration for intractable migraine

| | | |
|--|--------|---|
| Start | Dose 1 | 0.5mg |
| 8 hours later | Dose 2 | 0.7mg |
| 8 hours later | Dose 3 | 0.9mg (max advised daily dose is 2mg see below) |
| 8 hours later | Dose 4 | 1mg |
| All subsequent doses are 1mg, assuming the escalation to that was tolerated, and a maximum of seven more doses can be given - these additional doses may be only given on consultant's advice Generally, a maximum daily dose of 2mg should not be exceeded, without consultant input | | |

Renal impairment ^(ref 2)

- CONTRAindicated in severe renal impairment

Hepatic ^(ref 2)

- CONTRAindicated in severe hepatic dysfunction

Monitoring

- Refer to full prescribing information ^(ref 1,2). In particular monitor for signs of ergotism, serotonin syndrome and cerebral, cardiovascular or vascular ischaemia

Storage

Store below 25⁰C

References

- 1: SPC "[Dihydroergotamine \(DHE\): Prescribing Information](#)". Sterimax Inc. Oakville. USA. Date of revision Oct 2019
2. Uptodate "[Dihydroergotamine](#): Drug Information. Lexicomp. Accessed June 2023
3. Drugs.com March 22, 2022, accessed online June 2023
- 4: Expert opinion Dr Thomas Monahan, Consultant Neurologist. Email on file 8th June, 2023
- 5: Email on file, Dr Thomas Monaghan, Consultant Neurologist, email on file 22nd June 2023

Therapeutic classification

Ergot alkaloid