Levomepromazine (Green)*

Introduction

Levomepromazine is a phenothiazine used widely in palliative care to treat intractable nausea or vomiting, and for severe delirium/agitation in the last days of life.

Preparations

<table>
<thead>
<tr>
<th>Oral</th>
<th>6mg tablet (named patient preparation)</th>
<th>There is variation between brands regarding dispersion and scoring. Levinan® disperses well in water and is scored. Allow time for pharmacist to order. Can be used sublingually.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25mg tablet (scored)</td>
<td>Listed in the British National Formulary (BNF) but rarely used as dose too high for most patients.</td>
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<tr>
<td>Injection</td>
<td>25mg/ml 1ml ampoule (Note: Potential for over dosing where dose of 2.5mg may be confused for 25mg)</td>
<td>Used by subcutaneous bolus injection or continuous subcutaneous infusion.</td>
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Indications and uses

- Broad spectrum anti-emetic for intractable nausea/vomiting, often used second or third line.
- Potent antipsychotic/sedative used second line to manage severe delirium/agitation in a dying patient.

Cautions

- Lowers blood pressure and can cause significant postural hypotension in ambulant patients. Ideally, check blood pressure before starting treatment and then daily until dose stable. Additive hypotensive effect if combined with other anti-hypertensives.
- Has sedative effects – risk for falls (refer to falls guidance).
- Additive sedative effect if combined with other sedating drugs.
• Liver impairment: dose reduction and careful titration.
• Sensitises skin to sunlight – advise patients about skin protection, including reflection from water or snow.
• Rarely causes prolonged QT interval in cardiac disease or hypokalaemia.
• Parkinsonism, epilepsy (lowers seizure threshold).

Side effects
• Skin irritation at infusion site; dilute maximally when preparing syringes. Sodium chloride 0.9% may be better tolerated than water for injection (WFI) as a diluent, particularly at doses greater than 25mg.
• Drowsiness, dry mouth, dystonia, neuroleptic malignant syndrome (rarely).

Interactions
• Inhibits cytochrome P450 CYP2D6 metabolism – check BNF for drug interactions.

Dose and administration
• Low doses for nausea/vomiting and higher doses for delirium/agitation.
• Subcutaneous (SC) dose is half the oral dose.
• Cover syringe containing the infusion as degrades in sunlight (purple colouration).
• Long half life therefore each dose can last 12 to 24 hours; once or twice daily SC injection is an alternative to a continuous subcutaneous infusion.

Anti-emetic:
• Oral starting dose: 3mg once or twice daily. In some areas this may be administered as a single daily dose of 6mg.
• SC injection starting dose: 2.5mg to 5mg by subcutaneous injection 12 hourly as needed or 5mg to 15mg in 24 hours by continuous subcutaneous infusion. As required injections may be needed to gain control of agitation or while an SC infusion takes effect.

Antipsychotic/sedative:
• Second line added to a benzodiazepine if the patient is dying and agitated (refer to Delirium and Care in the Last Days of Life guidelines).
• As required injections may be needed to gain control of agitation or while an SC infusion takes effect and may be needed if agitation persists or worsens. Use 10mg to 25mg SC as required 2 hourly. Use lower doses if not used previously and in frail elderly. If symptoms remain uncontrolled seek specialist advice.
- SC infusion: 25mg to 100mg over 24 hours. Doses above 50mg require specialist advice.