Drug Guideline Pantoprazole (Somac)

Summary:
Pantoprazole is a proton pump inhibitor used in the short term treatment or prevention of gastric & duodenal ulcers, oesophagitis and in the management of upper GIT haemorrhage.

Approved by: ICU Medical Director
Publication (Issue) Date: November 2015
Next Review Date: November 2018


Background Information:

1. Introduction:

Patient safety

The Aims / Expected Outcome of this drug guideline:

Pantoprazole will be administered safely and appropriately without any adverse side effects

Related Standards or Legislation

NSQHS Standard 1 Governance
National Standard 4 Medication Safety

Related Policies

<table>
<thead>
<tr>
<th>Policy Code</th>
<th>Policy Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LH_PD2013_C03.01</td>
<td>Drug Administration</td>
</tr>
<tr>
<td>LH_PD2013_C03.00</td>
<td>Drug Prescribing</td>
</tr>
<tr>
<td>LH_PD2013_C03.12</td>
<td>Administration of Intravenous (IV) Medications</td>
</tr>
</tbody>
</table>

2. Drug Guideline: Policy Statement

• All care provided within Liverpool Hospital will be in accordance with infection control, manual handling and minimisation and management of aggression guidelines.
• Medications are to be prescribed and signed by a medical officer/authorised nurse practitioner (NP) unless required during an emergency.
• All drugs administered during an emergency (under the direction of a medical officer/authorised nurse practitioner) are to be documented during the event, then prescribed and signed following the event.
• Medications are to be given at the time prescribed (as close to the time as is possible when multiple drugs require ‘same time’ administration and, when the nurse is caring for more than one patient, recognition is given to a possible short delay to administration – antibiotics and other lifesaving drugs are to be prioritised) and are to be signed by the administering nurse.

• Parenteral medication prescriptions and the drug are to be checked with a second registered or endorsed enrolled nurse prior to administration. The “rights of drug administration” must be followed: right: patient, drug, dose, route, administration, time, reason for the drug, documentation, education and evaluation/outcome.

• Adverse drug reactions are to be documented and reported to a medical officer.

• Medication errors are to be reported using the hospital electronic reporting system: IIMS.

• Guidelines are for adult patients unless otherwise stated

3. Guideline

Actions

- Pantoprazole is a proton pump inhibitor (PPI).
- It inhibits specifically and dose proportionately H+/K+-ATPase, the enzyme which is responsible for gastric acid secretion in the parietal cells of the stomach.
- It effectively inhibits normal acid secretion and stimulated acid secretion.

Indications

- For prophylaxis or management of peptic ulcer disease in high risk patients: Cardiothoracic surgery, upper GI bleeds, patients who are already on proton pump inhibitors.
- Symptomatic improvement and healing of gastrointestinal diseases which require a reduction in acid secretion: duodenal ulcer, gastric ulcer, reflux oesophagitis, gastrointestinal lesions refractory to H₂-blockers, Zollinger-Ellison syndrome.
- Prevention on dyspepsia & peptic ulcer formation associated with NSAID’s.
- Ulcerative oesophagitis, gastro-oesophageal reflux.
- The management of patients with active GIT haemorrhage.

Contraindications

- Hypersensitivity
- Significant hepatic disease.

Precautions

- Investigate and rule out malignancies, such as gastric carcinoma.
- PPI therapy may be associated with an increased risk for osteoporosis related fractures of the hip, wrist, or spine. The risk of fracture is increased in patients who receive high doses; defined as multiple daily doses, and long-term PPI therapy.
- Acute interstitial nephritis may occur at any point during PPI therapy and is generally associated to an idiopathic hypersensitivity reaction. Discontinue pantoprazole if acute interstitial nephritis develops.
- Hepatic impairment – risk of accumulation in high dose therapy.
- Avoid use in pregnancy, safe in breastfeeding.

Significant interactions

- Concomitant administration of pantoprazole and warfarin can cause increased INR and prothrombin time. Monitoring of prothrombin time/INR is recommended during treatment.
- As with all acid suppressant medications, the absorption of drugs whose bioavailability is pH dependent (e.g. ketoconazole, itraconazole, posaconazole, erlotinib), might be altered due to the decrease in gastric acidity.
• Pantoprazole, should not be coadministered with HIV protease inhibitors for which absorption is dependent on acidic intragastric pH, such as atazanavir.

**Adverse effects**
- Dry mouth, metallic taste, increased sweating.
- Diarrhoea, constipation or flatulence
- Headache, dizziness.

**Presentation**
- Pantoprazole 40mg vial (powder for injection).

**Administrations Guidelines**

**For prophylaxis or management of Peptic ulcer disease:**

**High risk patients:** Cardiothoracic surgery, upper GI bleeds, patients who are already on proton pump inhibitors.
- Administer 40mg IV pantoprazole daily, slow bolus over 3 minutes

**High risk patients actively bleeding:**
- Loading dose of 80mg IV pantoprazole, stat: dilute 2 vials of 40mg pantoprazole with sterile 0.9% sodium chloride administer over 5 minutes or add 80mg to 50mL sterile 0.9% NaCl over 30 minutes.
- Ongoing infusion is pantoprazole 8mg/hour for 48-72 hours.
  - Reconstitute one 40mg vial with 10mL sterile 0.9% sodium chloride. Add to sterile 0.9% sodium chloride to make up a total of 50mL.
  - Administer at 10mL/hour (8mg/hour).

**Clinical Considerations**
- IV infusion should be changed to oral preparation as soon as practicable.
- Patients may experience dizziness or weakness and therefore require precautions to prevent falls.

4. **Performance Measures**

All incidents are documented using the hospital electronic reporting system: IIMS and managed appropriately by the NUM and staff as directed.

5. **References / Links**

1. MIMS Australia “MIMS Online” website, CIAP, Copyright MIMS Australia Pty Ltd. 2015. http://www.ciap.health.nsw.gov.au

**Author:** CNC (S.Shunker),

**Reviewers:** ICU Director, ICU – NM, NUM, ICU – CNE, ICU – CNS, Pharmacist.

**Endorsed by:** Prof. Michael Parr, ICU Director