Information For the Use
Granisetron (1mg)

Granityle Injection

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Description

Granisetron Injection is a selective serotonin 5-HT_3 receptor antagonist used to prevent and treat nausea and vomiting caused by chemotherapy, radiation therapy, and surgical procedures. By blocking serotonin's action on 5-HT_3 receptors in the brain and gastrointestinal tract, Granisetron effectively controls nausea and vomiting associated with these treatments.

Composition

- **Active Ingredient: Granisetron 1 mg per 1 mL of solution**
- **Formulation: Clear, sterile solution for intravenous or intramuscular administration**

Mechanism of Action

Granisetron works by selectively binding to 5-HT_3 receptors located in the chemoreceptor trigger zone (CTZ) and on the vagus nerve terminals in the gastrointestinal tract. This inhibition prevents the action of serotonin, a neurotransmitter implicated in triggering nausea and vomiting reflexes.

Indications

Granisetron Injection is indicated for:

1. **Prevention of acute nausea and vomiting associated with highly or moderately emetogenic chemotherapy.**
2. **Prevention of nausea and vomiting due to radiotherapy (especially total body irradiation or abdominal radiation).**
3. **Prevention and treatment of postoperative nausea and vomiting (PONV).**

Dosage and Administration

- **Chemotherapy-Induced Nausea and Vomiting (CINV):**
  - **Adults: 1 mg administered intravenously (IV) over 30 seconds, given 30 minutes before chemotherapy. Alternatively, 3 mg may be diluted in 50–100 mL of compatible IV fluid and infused over 5 minutes.**
  - **Pediatrics: 10–40 mcg/kg administered IV before chemotherapy.**
- **Radiotherapy-Induced Nausea and Vomiting:**
  - **Adults: 1 mg IV within 1 hour of radiation exposure.**
- **Postoperative Nausea and Vomiting (PONV):**
  - **Adults: 1 mg IV before anesthesia induction or as needed.**

Administration Route:

- **Administer via intravenous (IV) or intramuscular (IM) injection as prescribed.**

Contraindications

- **Hypersensitivity to Granisetron or any of its components.**
- **Use with caution in patients with known QT interval prolongation or electrolyte imbalances.**

Warnings and Precautions

1. **Cardiovascular Effects: Monitor patients with cardiac conditions or on concomitant QT-prolonging drugs.**
2. **Serotonin Syndrome Risk: Use with caution when combined with serotonergic drugs like SSRIs or SNRIs. Symptoms include agitation, hallucinations, tachycardia, and hyperreflexia.**
3. **Pregnancy and Lactation: Use only if clearly needed and prescribed by a physician.**
4. **Liver Function Impairment: Dose adjustment may be necessary in patients with severe hepatic impairment.**

Adverse Effects

- **Common: Headache, constipation, or dizziness.**
- **Less Common: Fatigue, diarrhea, or transient increases in liver enzymes.**
- **Rare but Severe: Hypersensitivity reactions (e.g., anaphylaxis), QT prolongation, or serotonin syndrome when used with other serotonergic agents.**

Drug Interactions

- **QT-Prolonging Drugs: Increased risk of QT interval prolongation (e.g., antiarrhythmics, certain antibiotics).**
- **Serotonergic Agents: Risk of serotonin syndrome when used with SSRIs, SNRIs, or MAO inhibitors.**

Storage Instructions

- **Store at controlled room temperature (15°C to 30°C).**
- **Protect from light and freezing.**
- **Keep out of reach of children.**

Benefits

1. **Potent Anti-Emetic: Effectively prevents and treats nausea and vomiting caused by chemotherapy, radiotherapy, or surgery.**
2. **Selective Action: Targets 5-HT_3 receptors without affecting other serotonin pathways, reducing side effects.**
3. **Fast Onset: Provides rapid relief, especially when given intravenously.**

Presentation

- **Available as a single-dose vial containing 1 mg of Granisetron in 1 mL of solution.**
- **Packaged in sterile ampoules for injection.**

Note: Granisetron Injection is a prescription-only medication and should be used under the supervision of a healthcare professional. Tailor the dosage and frequency according to individual patient needs and therapeutic response.

Manufactured in India for:

Cafoli™ LIFECARE

Cafoli Lifecare Pvt. Ltd.

(An ISO 9001: 2015 Certified Co.)

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