The following information is intended for healthcare professionals and is not intended to be used as a substitute for professional medical advice. Meropenem for injection is a powerful antibiotic used to treat various infections. It is important to understand the full prescribing information before using this medication. The information includes:

**INDICATIONS AND USAGE**
- Meropenem for injection is indicated for the treatment of infections caused by susceptible bacteria.
- It is available in oral and injectable forms, with concentrations ranging from 1 mg/mL to 20 mg/mL.
- Patients may experience various adverse reactions, including gastrointestinal disturbances, rash, and allergic reactions.

**CONTRAINDICATIONS**
- Patients with known hypersensitivity to meropenem or any component of the medication are contraindicated.
- Pregnant or breastfeeding women should consult a healthcare provider before using.

**ADVERSE REACTIONS**
- The most common adverse reactions include gastrointestinal issues such as diarrhea and nausea.
- Rare adverse reactions may include Stevens-Johnson Syndrome, angioedema, and erythema multiforme.

**DOSAGE AND ADMINISTRATION**
- For adult patients, a dose of 1 gram every 8 hours is recommended.
- For pediatric patients, a dose of 50 mg/kg to 100 mg/kg every 8 hours is suggested.

**PRECAUTIONS**
- Meropenem is associated with a risk of neutromotor impairment, particularly in patients with seizures.
- It is important to monitor for signs of renal impairment.

**NURSE'S DRUG GUIDE**
- Monitor for signs of infection and respond promptly.
- Ensure appropriate dosing and monitoring based on patient factors.

This information is based on the most recent prescribing information for Meropenem for injection and should be used in conjunction with a healthcare provider.

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**Footnotes**
- Please consult the complete prescribing information provided by the manufacturer for the most comprehensive and up-to-date information.
- Individual patient response may vary, and healthcare providers should be aware of potential interactions and contraindications.
- Always follow the specific dosing instructions provided by the prescribing information for the intended use.

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**References**
- [Full prescribing information for Meropenem for injection](link to full prescribing information)
- [Clinical studies and research](link to clinical studies and research)
- [Worldwide post-marketing adverse reactions](link to worldwide post-marketing adverse reactions)
Meropenem penetrates well into most body fluids and tissues including cerebrospinal fluid, achieving a mean peak plasma concentration of 23 mcg/mL. The drug is excreted unchanged within 12 hours. A further 28% is recovered as the microbiologically inactive metabolite.

Limited post-marketing experience indicates that if adverse events occur following overdosage, they are usually of a minor nature and self-limiting. Meropenem should be administered with caution to patients with a history of hypersensitivity to any penicillin as cross-reactivity may occur.

In vitro susceptibility testing: The susceptibility of microorganisms to meropenem may be determined using a standardized test method. The results should be interpreted according to the criteria provided in Clinical and Laboratory Standards Institute guidelines. MICs can predict susceptibility to meropenem. MIC testing should be performed on isolates that do not grow on agar base supplemented with 5% calf serum to ensure complete anaerobic growth. This procedure uses paper disks impregnated with 10 mcg of meropenem to test the susceptibility of isolates to meropenem. The tubes may be centrifuged to break up the microcolonies that form in the agar. Use of standardized inoculum concentrations is important; however, the effects of liver disease on the pharmacokinetics of meropenem.

11 CLINICAL PHARMACOLOGY

Meropenem, 500 mg and 1000 mg, is a white to off-white, opaque, oral suspension of meropenem, which is an amide analog of the beta-lactam antimicrobial agent meropenem. Meropenem is a monobactam antibiotic with its mechanism of action based on its ability to reversibly inhibit the enzymatic activity of beta-lactamases. Meropenem is rapidly absorbed after oral administration, with peak plasma concentrations achieved within 2-3 hours. Meropenem is mainly eliminated unchanged via renal clearance, with about 30% of the dose excreted in the stool as active drug metabolites.

12 CLINICAL USES

Meropenem is indicated for the treatment of the following infections:

- Bacterial infections of the respiratory tract, including pneumonia, lower respiratory tract infections, and otitis media.
- Bacterial infections of the urinary tract, including cystitis and pyelonephritis.
- Bacterial infections of the skin and soft tissue, including cellulitis and abscesses.
- Bacterial infections of the genitourinary tract, including gonorrhea.
- Bacterial infections of the gastrointestinal tract, including appendicitis.
- Bacterial infections of the central nervous system, including meningitis.
- Bacterial infections of the bloodstream, including sepsis and septicemia.
- Bacterial infections of the joints, including septic arthritis.
- Bacterial infections of the bone, including osteomyelitis.
- Bacterial infections of the ear, including otitis media.
- Bacterial infections of the eye, including conjunctivitis.

13 NONCLINICAL TOXICOLOGY

14.2 Complicated Intra-Abdominal Infections

Table 3: Susceptibility Data of Gram-Positive and Gram-Negative Bacteria to Meropenem

<table>
<thead>
<tr>
<th>Organism</th>
<th>MIC (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staphylococcus aureus</td>
<td>≤ 0.5</td>
</tr>
<tr>
<td>Enterococcus faecalis</td>
<td>≤ 1</td>
</tr>
<tr>
<td>Bacillus cereus</td>
<td>≤ 0.06</td>
</tr>
<tr>
<td>Clostridium perfringens</td>
<td>≤ 0.01</td>
</tr>
</tbody>
</table>

15.8.2.2 Interactions with Other Antibacterial Drugs

Meropenem has been shown to be active against a variety of bacteria, both aerobic and anaerobic. Meropenem is active against a wide range of gram-positive and gram-negative bacteria, including Enterobacter cloacae, Haemophilus influenzae, and Propionibacterium acnes.

15.8.2.3.2 Interactions with Other Antibacterial Drugs

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