2.1 Instructions for Use in All Patients

Ertapenem for Injection is indicated for the prevention of surgical site infection following surgery in patients whose operations are considered to be at moderate (30% to 50%) or high (greater than 50%) risk of developing a surgical site infection, including patients with obesity, diabetes mellitus, or who have undergone previous surgery at the site. The administration of Ertapenem for Injection may be initiated prior to surgery and continued for up to 14 days postoperatively.

2.2 Treatment of Infections

Infection is defined as an inflammatory response to invading microorganisms. Symptoms of infection include pain, fever, local tenderness, and redness. Initial therapy for bacterial infections should be guided by culture and sensitivity results. The effectiveness of Ertapenem for Injection has been demonstrated in clinical studies of patients with infections due to a wide range of pathogens, including gram-negative bacteria, gram-positive bacteria, and anaerobes. Ertapenem for Injection is a beta-lactam antibiotic and should not be administered to patients with a known history of anaphylaxis due to beta-lactam antibiotics.

2.3 Precautions in Adult and Elderly Patients

Infection is defined as an inflammatory response to invading microorganisms. Symptoms of infection include pain, fever, local tenderness, and redness. Initial therapy for bacterial infections should be guided by culture and sensitivity results. The effectiveness of Ertapenem for Injection has been demonstrated in clinical studies of patients with infections due to a wide range of pathogens, including gram-negative bacteria, gram-positive bacteria, and anaerobes. Ertapenem for Injection is a beta-lactam antibiotic and should not be administered to patients with a known history of anaphylaxis due to beta-lactam antibiotics.

2.4 Precautions in Pediatric Patients

Infection is defined as an inflammatory response to invading microorganisms. Symptoms of infection include pain, fever, local tenderness, and redness. Initial therapy for bacterial infections should be guided by culture and sensitivity results. The effectiveness of Ertapenem for Injection has been demonstrated in clinical studies of patients with infections due to a wide range of pathogens, including gram-negative bacteria, gram-positive bacteria, and anaerobes. Ertapenem for Injection is a beta-lactam antibiotic and should not be administered to patients with a known history of anaphylaxis due to beta-lactam antibiotics.
Ampicillin sodium is a carbapenem antibiotic and is supplied as sterile lyophilized powder for intravenous infusion after reconstitution. Its molecular weight is 344.4 g/mol. Ampicillin sodium is a semisynthetic derivative of penicillin, and its structural formula is: \( \text{C}_{16}\text{H}_{16}\text{O}_8\text{N}_2\text{SNa} \).

**1. INDICATIONS AND USAGE**

Ampicillin sodium is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed in this section. Ampicillin sodium is active against Haemophilus influenzae, Moraxella catarrhalis, and Streptococcus pneumoniae. It is also active against most strains of E. coli, Klebsiella pneumoniae, Bacteroides fragilis, and Staphylococcus aureus. Ampicillin may be used in the prophylaxis of postoperative bacterial infections, as a prophylactic agent in the treatment of endocarditis following surgical procedures, and in the prevention of infected peritoneal dialysis catheters.

**2. CLINICAL PHARMACOLOGY**

Ampicillin sodium is a penicillin-binding protein inhibitor that inhibits cell wall synthesis in susceptible bacteria. Its bactericidal action is achieved by inhibition of cell wall synthesis, resulting in cell lysis.

**3. CONTRAINDICATIONS**

Ampicillin sodium is contraindicated in patients with a history of allergy to penicillins or cephalosporins. It is also contraindicated in patients with a history of anaphylaxis or urticaria. Ampicillin sodium should be used with caution in patients with a history of renal impairment, hepatic dysfunction, or gastrointestinal disease.

**4. WARNINGS**

Ampicillin sodium is associated with an increased risk of Clostridium difficile infection, which can range from mild to severe, and may occur when initial restoration of microbial balance by antibiotics is discontinued. Ampicillin sodium should not be used in pregnant women or in children younger than 18 years of age.

**5. PRECAUTIONS**

Ampicillin sodium should be used with caution in patients with severe renal or hepatic impairment, or in patients with a history of gastrointestinal disease.

**6. ADVERSE REACTIONS**

The most common adverse reactions associated with the use of Ampicillin sodium are gastrointestinal disturbances, such as diarrhea and nausea. Other adverse reactions include skin reactions, such as urticaria and rash, and anaphylaxis.

**7. DOSAGE AND ADMINISTRATION**

Ampicillin sodium is administered intravenously at a dose of 0.5 to 1 g every 6 to 8 hours. The total daily dose should not exceed 4 g. Ampicillin sodium is available in vials containing 1 g of the drug. It is recommended that Ampicillin sodium be administered only by intravenous injection.

**8. OVERDOSAGE**

In case of overdose, Ampicillin sodium should be discontinued and supportive care provided. There is no specific antidote for Ampicillin sodium toxicity.

**9. DESCRIPTION**

Ampicillin sodium is a semisynthetic penicillin that is structurally similar to penicillin, and it is used for a wide range of infections. It is a beta-lactam antibiotic that inhibits bacterial cell wall synthesis.

**10. CLINICAL PHARMACOLOGY**

Ampicillin sodium is a beta-lactam antibiotic that inhibits bacterial cell wall synthesis. It is a broad-spectrum antibiotic that is active against a wide range of gram-positive and gram-negative bacteria.

**11. CLINICAL STUDIES**

Clinical studies have shown that Ampicillin sodium is effective in treating a variety of infections, including respiratory tract infections, skin and skin structure infections, and urinary tract infections.

**12. DOSAGE AND ADMINISTRATION**

Ampicillin sodium is administered intravenously at a dose of 0.5 to 1 g every 6 to 8 hours. The total daily dose should not exceed 4 g.

**13. PATIENT INFORMATION**

Patients should be informed about the symptoms of Clostridium difficile infection, which may include diarrhea and abdominal pain. They should also be instructed to report any symptoms to their healthcare provider immediately.