To reduce the development of drug-resistant bacteria and maintain the effectiveness of cefotetan and other antibacterial drugs, cefotetan should be administered in the smallest possible dosages and for the shortest possible time. The least amount of cefotetan that will achieve this is the one that will produce the desired effect. This applies particularly to prophylactic use, and short-term treatment of uncomplicated infections. In all other cases, appropriate dosages of alternative agents should be used. If a patient experiences an allergic reaction to cefotetan, the drug should be discontinued and alternative antibacterial therapy instituted.

**INTERPRETATION**

The bactericidal action of cefotetan results from inhibition of cell wall synthesis in susceptible organisms. This effect is not reversed by the action of penicillinase so that strains of *Staphylococci* (including *Staphylococcus aureus* and *Streptococcus pyogenes*) isolated from infections caused by these organisms cannot be accurately predicted on the basis of the antibacterial minimum inhibitory concentration (MIC) alone. It is also important to be aware that the antibacterial activity of a systemic antibiotic is often in excess of that needed to kill or inhibit clinically relevant infecting organisms. Therefore, when selecting or modifying therapy, consideration should be given to other factors such as patient health, age, sex, and the severity of infection.

**MICROBIOLOGY**

The antibacterial action of cefotetan results from inhibition of cell wall synthesis in susceptible organisms. This effect is not reversed by the action of penicillinase so that strains of *Staphylococci* (including *Staphylococcus aureus* and *Streptococcus pyogenes*) isolated from infections caused by these organisms cannot be accurately predicted on the basis of the antibacterial minimum inhibitory concentration (MIC) alone. It is also important to be aware that the antibacterial activity of a systemic antibiotic is often in excess of that needed to kill or inhibit clinically relevant infecting organisms. Therefore, when selecting or modifying therapy, consideration should be given to other factors such as patient health, age, sex, and the severity of infection.

**CLINICAL PHARMACOLOGY**

**CEPHALOSPORINS**

The region of the coccus system was studied to determine the following criteria:

1. Cefotetan is 88% plasma protein bound.
2. Interstitial fluids including:
   - biliary tract surgery
   - gastrointestinal surgery

**indications and use:**

1. Cefotetan for Injection, USP are intended for intravenous and intramuscular use. The solution varies from colorless to yellow depending on the concentration. The pH of freshly reconstituted solutions is approximately 4.5 to 6.5.
2. The yellow powder which is very soluble in water. Reconstituted solutions of cefotetan for intravenous use are colorless. Cefotetan for injection should be administered slowly over 1 to 2 hours as a continuous infusion to avoid precipitation.
3. There is a lower concentration between the systemic cleared of cefotetan and the end of a 30-minute infusion.
Hemodialysis may be considered, particularly if renal function is compromised. Anticonvulsant therapy can be given if clinically indicated. If seizures associated with drug therapy occur, the drug should be discontinued.

Hepatitis: Severe hepatitis has rarely been reported. A mild or moderate form of hepatitis is more common.

Hypersensitivity: Anaphylactic reactions and urticaria have been reported.

Geriatric Use: Impaired renal function is common in the elderly. Decreased doses are recommended. Cefotetan is known to be substantially excreted by the kidney, and the risk of toxicity is greater when renal function is impaired. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function periodically on the day of dialysis. Care should be taken in the interpretation of prothrombin time with or without bleeding.

Hematology: Eosinophilia (1 in 200), positive direct Coombs test (1 in 250), and rise in ALT (SGPT) (1 in 150), AST (SGOT) (1 in 300), alkaline phosphatase (1 in 900) have been reported in patients treated with cefotetan, the following adverse reactions have been observed in 1% of patients: anemia, leukopenia, thrombocytopenia.

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