عنوان مقاله:

Clinical Pharmacokinetics of Amikacin in Neonates

محل انتشار:

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خلاصه مقاله:

Amikacin is a bactericidal aminoglycoside. Aminoglycosides inhibit bacterial protein synthesis. The antibacterial spectrum of amikacin is the broadest of aminoglycosides. Because of its resistance to many of the aminoglycosides-inactivating enzymes, it has a special role in hospitals where gentamicin- and tobramycin-resistant microorganisms are prevalent. Amikacin is active against the majority of aerobic gram-negative bacilli in the community and in the hospitals. This includes most strains of Serratia, Proteus, Enterobacter, and Escherichia coli that are resistant to gentamicin and tobramycin. Amikacin is active against Mycobacterium tuberculosis (99% of strains are inhibited by 4 µg/ml amikacin), including streptomycin-resistant strains atypical mycobacteria. The gastrointestinal absorption of amikacin is minimal and is largely excreted through the renal glomerulus. In neonates, the dose of amikacin is 15 mg/kg. In the first week of life, a loading dose of 10 mg/kg followed by a maintenance regimen of 7.5 mg/kg has been suggested. After the first week of life, the corresponding doses are 17 mg/kg (loading dose) and 15 mg/kg (maintenance dose). The peak and trough doses of amikacin should be 20-30 µg/ml and

کلمات کلیدی:

Amikacin, effects, neonate, Pharmacokinetics