Revised Abstract

Background: Strains of Pneumococcus resistant to β-lactam, macrolides, quinolones and other agents occur resistant and resist non-vaccine serotypes have appeared. CEM-101 is member of the macrolide-ketolide group which is 2-4 times more active than teicoplanin against macrolide resistant pneumococci. Infections caused by drug-resistant group A streptococci are encountered worldwide and sometimes life-threatening infections caused by these organisms are encountered. Streptococcus pyogenes strains, although retaining their β-lactam suscectible are sometimes multiply resistant. Teicoplanin is active against all multiple resistant S. pyogenes (genotypes except for ermB).

We tested 1) Activity of CEM-101 compared to those of commonly used drugs. CEM-101 was compared against methicillin-resistant S. aureus (MRSA) strain (31 strains), penicillin-resistant S. pneumoniae (64 strains), penicillin-intermediate S. pneumoniae (38 strains), penicillin-susceptible S. pneumoniae (194 strains), pneumococcus (101 group A streptococci comprised 26 macrolide susceptible and 75 macrolide resistant strains. The 101 group A streptococci comprised 26 macrolide susceptible and 75 macrolide resistant strains. The 101 group A streptococci comprised 26 macrolide susceptible and 75 macrolide resistant strains.

Materials and Methods

Penicillin S (53) 0.008-0.06 0.03 0.125  Quinolone S 0.015-2 0.03 0.125  Quinolone R 0.015-16 0.05 8

Penicillin G MIC range MIC50 MIC90

Penicillin S 0.015-1 0.06 0.25

CEM – 101

Erythromycin 0.125-8 0.25 2

Mefloquine 0.125-4 0.25 2

References