



Antibacterial Activity of Cefoperazone Metal Complexes

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SUMMARY. Cefoperazone complexes with different metal ions of 1:1 metal to antibiotic stoichiometry have been prepared. The [M(cefopz)Cl] complexes (M = Co, Cu and Cd) were characterized by physico-chemical and spectroscopic methods. The solubility of the cefoperazone complexes in water and common organic solvents is reduced on complexation. All complexes show higher activity against *Salmonella enteritidis*. The Co(II) and Cd(II) complexes show better activity in the case of *Pseudomonas aeruginosa* and *Escherichia coli*, and Cu(II) and Cd(II) complexes against *Shigella sonnei* than cefoperazone sodium. The complexes showed to be less active than free cefoperazone against *Staphylococcus aureus* and *Proteus mirabilis*.

KEY WORDS: Antibacterial activity, Antibiotic, Cefoperazone sodium, Metal complexes.

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