Antibacterial Efficacy of Disinfectants Against Some Gramnegative Bacteria

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Summary: The antibacterial effect of 11 new commercially manufactured disinfectants on clinical isolates of Salmonella typhimurium DT104, Serratia marcescens and Pseudomonas aeruginosa was studied. The substances tested represented six pure quaternary ammonium substances (QAS) and five QAS combined with other ingredients. The antibacterial efficacy was characterized by influencing the growth of bacterial cells expressed by MIC and ED 50 values. The disinfectants are divided into three groups according to their efficacy. The antibacterial efficacy of disinfectants on S. typhimurium DT104 in the study is the highest in comparison with S. marcescens and P. aeruginosa strains. The highest inhibition of growth was caused by Diesen forte on S. typhimurium DT 104 and by Benzalkonium chloride on both S. marcescens and P. aeruginosa strains.

Key words: disinfectants, antibacterial activity, Serratia marcescens, Pseudomonas aeruginosa, Salmonella typhimurium DT 104

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