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Preparation of the oligohexamethyleneguanidinecomplexes with para-aminosalicylic acid and investigation its properties

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Abstract

In this paper were discussed approaches to increase the activity of the well-known domestic biocide with wide spectrum of action – branchedoligohexamethyleneguanidineagainst Mycobacterium tuberculosis. The practical significance is that the bioavailability of para-aminosalicylic acid has been increased and stable water-soluble complexes with oligohexamethyleneguanidine were obtained, by adding hydrogen succinate oligohexamethyleneguanidine or sodium acetate solution. Bactericidal activity of the resulting complexes against Mycobacterium smegmatis was studied. It was found that theleast inhibitory concentration of the complexes is in the range of 0.1 ug/ml to 1 ug/ml of culture fluid. Thus, these data indicate that the complexes can be used to create drug with potent bactericidal biocidal activity, high reproducibility properties and low toxicity.