

CYTOTOXICITY AND INHIBITORY EFFECT OF PARA-AMINO PHENYL MERCURY(II) ACETATE AGAINST GROWTH OF SOME BACTERIA (IN VITRO)

Keyword: Inhibitory effect, cytotoxicity, hemolytic.

ABSTRACT

It was found that 0.1gm of para-aminophenyl mercuric acetate PAPMA dissolved in 10ml of distilled water added in to, Muller-Hinton agar, inhibited the growth of four standard strains bacteria [E.coli ATCC25922, S.aureus ATCC 25923, P.aeruginosa ATCC27853 and S.aureus NCTC6571] and four clinical strains bacteria positive and negative to gram stain [Klebsiella sp., from blood isolate, E.coli, from stool isolate, Staphylococcus sp., from blood isolate, and Proteus sp., from urine isolate]. Higher concentrations of PAPMA solution in to the medium inhibited growth of bacteria under study more strongly. The minimal inhibitory concentration (MIC) and cytotoxicity of PAPMA were studied against human blood and it was found that it has no hemolytic in RBCs for human in 1– 5µg/ml. The acute toxicity LD50 of PAPMA was studied and it was about 11.3mg/Kg.