Cytotoxicity and the Inhibitory Effect of β-Naphthyl Mercuric Chloride against some Clinical isolates of Bacteria and Fungi (in Vitro)

ABSTRACT

The inhibitory effect of β-Naphthyl Mercuric chloride against some clinical isolates of bacteria and fungi was examined , It was found that when 0.1 gm of β-Naphthyl Mercuric chloride was dissolved in 10ml distilled water and then added to the Muller-Hinton agar and Sabouraud Dextrose agar was inhibited the growth of six clinical isolates of bacteria[*E.coli* from stool isolate, *P.aeruginosa* from urine isolate , *S.aureus* from blood isolate , *S. epidermidis* from urine isolate, *Klebsiella sp* from urine isolate. And other clinical isolate of *S.aureus* from urine isolate].The same solution was used to inhibit the growth of three fungal isolates [*Aspergillus flavus ,Candida albicans* and *Cryptococcus sp.]* the minimal inhibitory concentration (MIC) against these bacterial isolates were evaluated, and the Cytotoxicity of β-Naphthyl Mercuric chloride against human red blood cells was also evaluated and it was found that this compound cannot form hemolytic in RBCs in a concentrations(0.25-0.1 mg/ml).