



Study Of The Cytotoxicity Effect Of New Co(II), Mn(II), Ni(II), And Cu(II) Complexes Of Chalcone On Cancer (Cell Line L₂₀b) And Antimicrobial Activity

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ABSTRACT

A new series of Co(II), Mn(II), Ni(II), and Cu(II) complexes with the chalcone ligand were studied on the growth of mutant mouse cells (Mice Transformed cell Line) (L₂₀B) by using in vitro system and compared with anticancer drug cisplatin (cis-pt) as appositive control. The cancer cells were treated with different concentration and cis-pt after 72 hr. exposure time. The cytotoxic activity was tested by inhibition rate as parameter. The results showed significant differences ($p < 0.05$) for each three treatments when the inhibition rates were increased. The synthesized compounds were tested for antimicrobial activity by cup plate diffusion method. The results indicate the enhanced activity of metal complexes over the parent ligands.

Keywords: Chalcone, Complexes, antimicrobial activity, Cytotoxicity cisplatin.
