

EFFECTS OF MAGNESIUM CHLORIDE AND DIMINAZENE ACETURATE ON THE PATHOGENICITY OF TRYPANOSOMA BRUCEI INFECTION IN RATS

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ABSTRACT

Thirty- five healthy albino rats of both sexes, weighing between 180 -220 grams were used to study the effects of the trypanocide, diminazene aceturate treatment in combination with oral magnesium chloride (100mg/kg weight) supplementation on the pathogenicity of tissue-invasive *Trypanosoma brucei* infection. The rats were divided into seven groups (A-G). The rats were assessed for parasitaemia. At 11 days post infection, the treated groups and untreated groups were assessed and tissues removed and weighed. The liver enzymes (ALT, AST, ALP) levels of rats infected, but not treated showed significant ($P < 0.05$) increase liver enzymes while those treated and supplemented with $MgCl_2$ had the enzymes levels tendering toward normal. The uninfected and not treated but supplemented with $MgCl_2$ rats (Groups B) had their livers, spleens and kidneys weights within the normal range compared with the control (Group A). the infected, not treated control rats had enlarged livers, kidneys and spleens which were reflected in their weights (Group F). The rats infected, treated and supplemented with $MgCl_2$ (Groups C, D, E, and G) had their livers, spleens and kidneys weights significantly improved ($P < 0.05$) compared with the normal group.

Key words

Magnesium chloride, Hepatic biochemical markers, Diminazene aceturate, *T. brucei*, Pathogenicity