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Effect of repeat dosing of Dinazene® on the serum biochemistry of experimental *Trypanosoma brucei* infection in albino rats

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The effect of repeated doses of Dinazene® on the serum biochemistry of experimental *Trypanosoma brucei* infection in albino rats was studied. Thirty adult female albino rats (130g–190g) were used and assigned into 6 groups (A–F) of 5 rats, fed proprietary feed and water ad libitum. Groups A–D were inoculated intraperitoneally with 10^6 trypanosomes while groups E and F served as uninfected controls. Groups A and E were treated once at day, 11 post inoculation (PI) with 7.0 mg/kg of Dinazene®; group B was treated twice at days 11 and 18 PI; group C was treated three times at days 11, 18 and 25 PI; while group D was treated four times at days 11, 18, 25 and 32 PI. The serum activities of ALT, AST and ALP; and the serum levels of urea, creatinine and bilirubin were assayed fortnightly. Parasitaemia was also determined. The results showed an average pre-patent period of 7 days PI. All treated rats were aparasitaemic by day 16 PI. Relapse infection was recorded in group A, 35 days PI and in groups B and C on 49 days PI. Significant increases ($P < 0.05$) in the activities of ALP, AST and ALP following relapse (week 11) occurred in groups B and C. Similarly the serum levels of bilirubin, creatinine and urea increased significantly ($P < 0.05$) among the relapsed groups. It is concluded that although Dinazene® was able to prevent relapse after four repeated treatments there was no observed toxicity.

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