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Effectiveness of albendazole against viability of *Entamoeba histolytica* in experimental animals

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Objective: Intestinal amebiasis is still an important health problem in developing countries of the world. One of the most issues for future biomedical research is the development of antimicrobial resistant, in order to search for alternative new antiamebic drugs. A study was carried out to evaluate the efficacy of albendazol on the viability of *Entamoeba histolytica* clinical isolate from human which used for experimental animals.

Material and Methods: All experimental animal models (30 albino mice and 30 rabbits), divided into 3 groups, each group with either 10 mouse or 10 rabbits, were orally infected with *E. histolytica* (clinical isolate), then after 7 days they were given drugs (Metronidazol or Albendazol) daily according to body weight prepared in advance for 5 days duration and in addition to the controls without drugs. Stool specimens of each group were examined microscopically for viable trophozoites, and the number of

these trophozoites were counted with haemocytometer chamber, as compared to untreated and treated groups. A statistical method used was student t-test.

Results: The results showed infection of *E. histolytica* was able to be initiated in rabbits only. Albendazol and metronidazol were highly effective (100%) on treatment of infected groups of rabbits (table I). Trophozoites of *E. histolytica* was highly sensitive to albendazol (25% viability), or to metronidazol (22.7% viability) at a dose of 400 mg / kg / day and 250 mg / kg / day respectively, which was significant in relation to the control 500% viability (table II). However, the differences were significant at the level ($p < 0.01$).

Conclusions: The present study showed that the newly used albendazol is very effective antiamebic drug as metronidazol in rabbits.

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