

Prevalence of Helminths in Alimentary Tract of Rodents in Hamadan City, 2012

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Abstract

Background and Objective: Assessment of alimentary tract helminthes of rodents has a great zoonotic importance. This study aimed at determining the prevalence of helminth infections in rodents in Hamadan.

Material and Methods: a total of 100 rodents trapped from different parts of city were transported to laboratory. After anesthetizing by chloroform, the animals were undergone an operation to isolates the helminthes. The isolates were stained by Carmine and identified at the genus and species levels. Furthermore, age, sex, weight of rodent and size of various organs of body were determined.

Results: Totally, 62% of the rodents were infected to intestinal helminthes. All trapped rodents were *Rattus norvegicus*. Six species of helminthes, including three Nematode (45%), 3 Cestode (51%) and no Trematode were isolated from rodents. The infection rate for different helminthes was as follow: *Hymenolepis nana* 21%, *H. diminuta* 29%, *Heterakis spumosa* 43%, *Strongyloides* sp. 1% *Trichuris muris* 1% and *Cysticercus fasciolaris* 1%.

Conclusion: in this area, infection rate of alimentary tract helminthes in the *Rattus norvegicus*, especially zoonotic helminthes, is relatively high, and the rate of Cestodes is higher than those of Nematodes and Trematodes.

Key words: Prevalence, Helminthes, Alimentary tract, Rodents

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