Parasitological Survey For Intestinal Parasites And Ectoparasites In Black Rat (Rattus Rattus) From Two Regions In Gaza Strip, Palestine

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Background
Two types of rats are present in Gaza Strip Black rats (Rattus rattus) and brown rats (norvegicus rattus). These rats are widely distributed and causes damage for people in homes. Intestinal parasites and ectoparasites of rats were not investigated before in Gaza Strip. Rodents are a key mammalian group, and are highly successful in many environments throughout the world. They are known to transmit diseases and act as reservoir host for many zoonotic pathogens that pose a health risk to humans and animals. These rodent habitats play an important role in the epidemiology of certain zoonotic diseases (Ambu, 1996).
Parasites of rodent could be viruses, bacteria, fungi, protozoa, helminthes and insects. Endoparasites of rodents play an important role in the zoonotic cycles of many diseases, some of which are more important than others (Mulkit & Cheong, 1971).

Objective
To study the occurrence of intestinal parasites and ectoparasites of rats in Khan Younis, Jabalia in Gaza Strip.

Methods
Thirty seven black rats (Rattus rattus) were trapped and examined for the presence of intestinal parasites and ectoparasites. These rats were dissected and examined by usual routine in parasitology (wet mount, staining and identification) in the laboratories of Biology department in the period Jan 2008, May 2009.

Results
The present study showed that the general prevalence of intestinal parasites of rats (56.8%) & ectoparasites (27.02%). The most isolated types of human parasites were Giardia lamblia, E.histolytica/dispar and Isospora. The most isolated of intestinal round worms of rats Syphacia obvelata & Heligmonoides josephi. cestodes Hymenolepis diminuta and ectoparasites Xenopsylla cheopis & Polyplax Spinulosa.

It is concluded that the black rat was infected with intestinal parasites & ectoparasites where H.diminuta was the most type of isolated cestodes. Black rat was a mechanical carrier for Giardia lamblia, E.histolytica/dispar.

It is recommended that:
Awareness from the parasitic infections transmitted by black rat in Khan Younis, Jabalia. Protections against rodent in general.