

The Correlation between Cutaneous Leishmaniasis and Rock Hyrax Colonies in the North of Palestine.

Students:

Haya Najdi
Mohammad Abu Eid

Supervisor :

Dr. Waleed Basha

Abstract :

Introduction:

Leishmania is a genus of trypanosomatid protozoa that cause Leishmaniasis. Cutaneous Leishmaniasis has recently re-emerged in areas in the Middle East and constitute a major public health concern. Rock hyrax (*Procavia capensis*) and sand rat (*Psammomys obesus*) are two of the main reservoirs of leishmania that reside in the Middle East countries and may have a major role in cutaneous leishmaniasis transmission in Palestine.

Materials and methods:

This study was carried out in the north of the West bank in Palestine mainly in three cities Nablus, Jenin and Qalqilya. Rock hyrax and spiny mice were captured, samples were taken for detection of leishmania DNA by kDNA PCR.

Results:

A total of 15 rock hyraxes and 25 spiny mice were captured. Five of the spiny mice liver samples were positive for leishmania DNA. Two other spiny mice had *hymenolepis diminuta* in there intestine. *Trichomonas* were also observed in the fecal sample of other two mice.

Discussion and conclusion:

As opposed to the thoughts that rock hyrax is a possible reservoir for leishmania in Palestine, all the samples that were collected from them were negative for leishmania DNA. Interestingly, there were positive samples in spiny mice, which in addition to other facts raise the possibility that these rodents are a possible reservoir for leishmania.