

Treatment of cutaneous leishmaniasis by topical application of honey

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Objective: The objective of this study is to evaluate the effect of topical application of honey on induced cutaneous leishmaniasis ulcer in 25 hamsters (*Mesocricetus auratus*) compared with control group of another 25 hamsters treated by pentostam injection.

Methods: A group of 50 adult male and female hamsters were inoculated with 1×10^5 cells/mL of *Leishmania major*. Culture medium was examined microscopically for promastigotes. Samples of 0.1 ml positive culture were inoculated to the hamster-tail base intradermally. The impression smear were prepared by animal samples. Smears were fixed and stained with Giemsa's. Honey was applied topically to infected lesions of one group of hamsters. The control group were injected with 0.1 mL pentostam intramuscular every other day. Lesions were measured daily by millimeter paper.

Results: After two weeks, all the inoculated hamsters developed different types of lesions. The 25 group of hamsters treated with honey responded to treatment after one week. The control group treated with pentostam injection showed low response to treatment, it took prolonged time to heal up to 12-16 weeks.

Conclusion: Topical dressing of cutaneous leishmaniasis ulcers with honey is very effective and helps in the treatment in a short time as compared with pentostam injection.

Biography

Mahasen Wadi received her B.S. from Cairo University, Egypt. She Worked at the central research laboratory Khartoum, Sudan. She joined work at King Saud University, Saudi Arabia, Riyadh 1988, Department of Clinical Laboratory science, Microbiology. She completed the Ph.D. from AL Neelain University, Faculty of Medical Laboratory Sciences 2010 Khartoum, Sudan. She worked in the area of Bee Honey as a natural product antimicrobial. She published a numbers of papers in reputed journals and Participated in many Internationals and national conferences. She issued a patent research about the antimicrobial activity of Sudanese honey. She attended many workshops and seminars. Awarded certificate of prestigious Author for the journal of Bacteriology & Parasitology 2011. Awarded a medal on participating in workshop at King Saud University Saudi Arabia 2011. Awarded many appreciation and thanks certificate in scientific activities. Member of many associations: German Apitherapy Society, American Apitherapy Society, International Bee Research Association , European Society of Clinical Microbiology and Infectious Disease ESCMID and Sudanese Veterinary Association . she served as reviewer of various journal.

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