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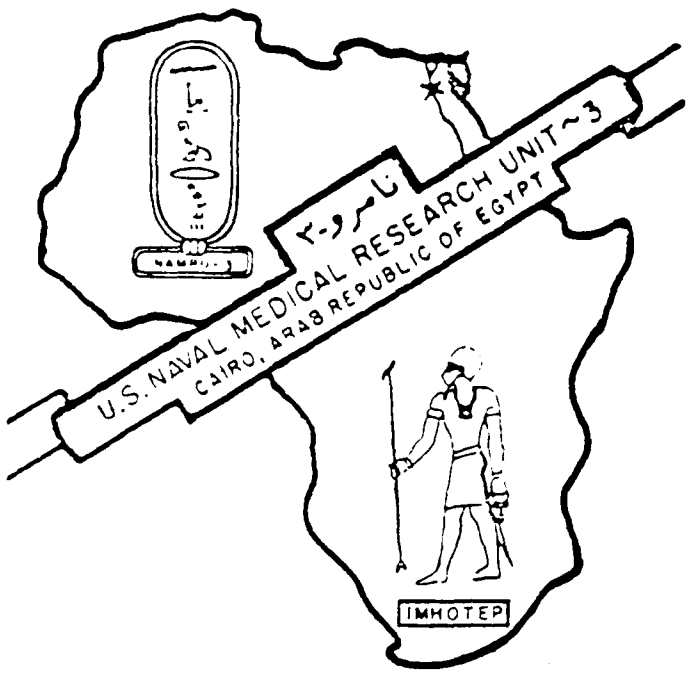

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CUTANEOUS LEISHMANIASIS IN NORTH SINAI

BY

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Short Report

Cutaneous leishmaniasis in north Sinai

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During the period from October 1982 to July 1985 cutaneous leishmaniasis was diagnosed in 113 soldiers of the Multinational Force and Observers MFO stationed in northeast Sinai. Cutaneous lesions varied from 1 to 32 in number per person on exposed areas of the body. They ranged in diameter from 3 to 75 mm. *Leishmania* was isolated from cutaneous lesions in 12 MFO soldiers, 21-28 years of age stationed 60 km southeast of El Arish, and maintained *in vitro* using Tanabe's medium TANABE, 1923). Intrasplenic inoculation of promastigotes from cultures into hamsters according to SCHNUR *et al.* 1973) resulted within 12 weeks in the development of cutaneous lesions on the nose, ear, base of tail and foot-pad. Organisms were detected by microscopical examination and by culture from cutaneous lesions, testis and epididymis and only by culture from spleen and bone-marrow, a dissemination pattern typical of cutaneous leishmaniasis. The excreted factor of the promastigotes in culture medium when serotyped according to SCHNUR & ZUCKERMAN (1977) corresponded to marker strains L-137, serotype A_1 and L-133, serotype B_2, similar to *L. major* isolated from Israel south of the Dead Sea SCHNUR & ZUCKERMAN, 1976). The electrophoretic mobilities of G6-PD, GPI, MDH, MPI, NH, PGM and 6-PGD were studied on Titan III cellulose acetate membranes following the method of LANHAM *et al.* (1981), who also give the enzyme names in full. The composition of the electrode, developer buffers, and developing conditions for each enzyme were conducted following the methods of KREUTZER & CHRISTENSEN (1980) for 6-PGD, HARRIS & HOPKINSON (1976) for MDH and NH, and LANHAM *et al.* (1981) for G6-PGD, GPI, MPI and PGM. The banding pattern for the first 6 enzymes of the Sinai isolates was identical to that of *L. major*, marker strain L-137, and variant subtype B for 6-PGD. These patterns are similar to those of isolates from western Negev, where transmission involves the sandfly *Phlebotomus papatasi* and *Psammomys* and *Meriones* rodent species (SCHLEIN *et al.*, 1984). ZIMMERMAN *et al.* in press) and Dees (unpublished data) found the same vector and rodent species in our study area. These biochemical and biological similarities suggest that this area in northeast Sinai is an extension of the endemic focus of *L. major* in nearby mid-western Negev.

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