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CUTANEOUS LEISHMANIASIS IN EASTERN LIBYA

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Cutaneous leishmaniasis is extremely uncommon in eastern Libya. Seven patients were seen over a period of ten years, of whom, 5 had visited areas which are endemic foci, while 2 were foreign nationals. Rifampicin was effective in 3 patients while it was a failure in 2. Metronidazole was used in 2 patients with success, while one patient responded to co-trimoxazole.

Key words : Cutaneous leishmaniasis, Rifampicin.

Cutaneous leishmaniasis, caused by *Leishmania tropica* has a varied clinical picture. The commonest presentation is the so called oriental sore although rare forms have also been documented.[1] The disease is endemic all around the Mediterranian coast, particularly north Africa, Asia minor, Asia, including China and Southern Russia, Central and South America.[2] However, in every country there are certain endemic foci. In Libya, the disease is extremely rare in the eastern part of the country. During the past 10 years, we encountered only 7 cases of cutaneous leishmaniasis (CL). On the contrary, in a recent study from the western part of the country, Tripoli which is about one thousand kilometers away, 36 cases were seen over a period of 2 years.[3]

The present study evaluates the efficacy of various drugs used in 7 patients of CL seen by us.

Case Reports

Case 1

A 30-year-old Libyan woman who had been to Iraq about an year ago was seen with two erythematous and ulcerated plaques over the left leg of 5 months duration. The lesions started as nodules which gradually increased in size and ulcerated. The margins of the ulcer were ill defined and indurated. Extensive yellowish brown crusting was present predominantly on the edges, and the centre of the ulcers showed dirty necrotic granulation tissue. There was regional lymphadenopathy. A tissue smear and a subsequent skin biopsy showed marked infiltration of dermis with histiocytes containing *Leishmania tropica* bodies.

She was treated initially with rifampicin 20 mg/Kg body weight orally daily for a period of 6 weeks. There was no improvement. Subsequently she was put on metronidazole (two courses of 200 mg three times daily for 10 days at an interval of 10 days) with dramatic improvement.

Case 2

A 23-year-old Libyan male who had been to Chad about 6 months ago, presented with an erythematous crusted plaque, approximately 4 cm in diameter on the left shin of 2 months duration. Skin biopsy showed *Leishmania tropica* bodies inside the histiocytes. Patient was treated with 600 mg rifampicin orally daily, which led to complete healing of the lesion in 7 weeks.

Case 3

A 37-year-old Libyan male who had recently been to Garyan district in the west of Libya, was seen with 2 ulcerated erythematous plaques, one on the right arm and the other on the right cheek. The lesions had started almost simultaneously. After having confirmed the diagnosis on biopsy, administration of metronidazole 600 mg twice daily for three weeks resulted in nearly complete clearing of the lesions.

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Case 4

A 30-year-old male from Bangladesh presented with an erythematous papulo-nodular and ulcerated lesion on the left leg of 2 months duration. Skin biopsy confirmed the diagnosis of cutaneous leishmaniasis. Because of the marked secondary infection, it was decided to administer co-trimoxazole to the patient. Two tablets twice daily for three weeks was effective in controlling the secondary bacterial infection as well as in the healing of the ulcers. Further follow up for 8 months showed no recurrence.

Case 5

A 28-year-old male Libyan had an ulcerated plaque, about 10 cm in diameter on right forearm and an asymptomatic erythematous nodular lesion on left cheek of about 2 months duration. History revealed that the patient had visited his relatives in Tripoli about 6 months ago. Tissue smear from the edge of the lesion as well as skin biopsy were positive for *Leishmania tropica* bodies. Patient was effectively treated with rifampicin 600 mg daily over a period of 6 weeks.

Case 6

A 35-year-old Libyan male who had been to Garyan district in Tripoli about an year ago, reported with multiple erythematous papulo-nodular lesions over the face and the extremities of 3 months duration. A diagnosis of disseminated cutaneous leishmaniasis was confirmed on skin biopsy and the patient administered 1200 mg rifampicin daily. It resulted in melting of the lesions over a period of 8 weeks. Follow up for 3 months has not shown any recurrence.

Case 7

An 18-year-old Sudanese student who had just returned from holidays, presented with an ulcerated plaque on the left leg of a month's duration. There was regional lymphadenopathy. Tissue smear and skin biopsy confirmed the diagnosis of cutaneous leishmaniasis. Treatment with rifampicin was unsuccessful. Co-trimoxazole 2 tablets twice daily for 2 weeks was also without effect. Patient was then put on metronidazole 1200 mg daily but was lost for further follow up.

Comments

Our experience suggests that cutaneous leishmaniasis does not occur in the eastern part of Libya. Only 7 patients were seen over a period of 10 years. Of these, 2 were expatriates and each of the remaining 5 gave a history of having visited areas which are known endemic foci for CL. While 3 patients probably acquired the infection abroad (2 from Chad, 1 from Iraq) 2 had visited Garyan, which is north-west of Libya near Tripoli and is an endemic focus for CL. Most of the cases of CL reported by Khatri et al[3] belonged to this area.

Although CL is a self-healing disease, its duration is long, often unpredictable and the morbidity is considerable. Each lesion heals with a scar. There are many treatments currently in use, but none is satisfactory. In all the 7 patients, we tried different forms of therapies. Of 5 patients in whom rifampicin was used, the response was excellent in 3, while in 2 it was a failure. Metronidazole was effective in 2 patients; in one patient it was used after rifampicin had failed to control the lesions. However, both these drugs were ineffective in the last patient who was later lost for follow up. Thus, our overall experience with rifampicin in treatment of CL is not very encouraging. Selim and Kandil[4] and Vasquez[5] however, reported complete success with rifampicin in all their cases of CL. However, in the experience of Khatri et al[3] and Gupta and Pasricha[6] the response to rifampicin was variable as in our cases. We did not try antimonials because of their non-availability here. We however, plan to use ketoconazole in future for patients of cutaneous leishmaniasis as this has been recently reported to be very effective in this disease.[7]

References

1. Al-Gindan Y, Omer AHS, Al-Humaidan Y et al : A case of mucocutaneous leishmaniasis in Saudi Arabia caused by leishmania major and its response to treatment, Clin Exp Dermatol, 1983; 8 : 185-188.
2. Harman RRM : Parasitic worms and protozoa (cutaneous leishmaniasis), in : Text book of Dermatology, 3rd ed, Editors, Rook A, Wilkinson DS and Ebling FJG : Blackwell Scientific Publications, Oxford, 1979; pp 902.
3. Khatri ML, Shafi M and Mosadiq M : Cutaneous leishmaniasis in Tripoli, a study of 36 cases, Ind J Dermatol Venereol Leprol, 1984; 50 : 137-141.
4. Selim MM and Kandil E : Rifampicin in the treatment of cutaneous leishmaniasis, J Kuwait Med Assoc, 1972; 6 : 159-166.
5. Vasquez FR : Rifampicin in leishmaniasis, Arch Dermatol, 1977; 113 : 1610-1611.
6. Ramji Gupta and Pasricha JS : Evaluation of rifampicin for cutaneous leishmaniasis, Ind J Dermatol Venereol Leprol, 1984; 50 : 131-133.
7. Kubba R, Al-Gindan Y, Amel-Hassan et al : Ketoconazole in cutaneous leishmaniasis, Results of a pilot study, Saudi Med J, 1986; 7 : 596-604.