

RELATO DE CASO.

SPONTANEOUS REGIONAL HEALING OF EXTENSIVE SKIN LESIONS IN DIFFUSE CUTANEOUS LEISHMANIASIS (DCL)

Jackson M.L. Costa, Ana Cristina R. Saldanha, Conceição de Maria P. e Silva, Maria dos Remédios F.C. Branco, Aldina Barral, Edgard M. Carvalho e Achiléia L. Bittencourt

The authors report a case of diffuse cutaneous leishmaniasis, with longstanding evolution and presenting with diffuse infiltrated lesions rich in amastigotes in the absence of mucosal involvement. In situ characterization with monoclonal antibodies revealed Leishmania amazonensis. Large regional lesions have presented spontaneous healing without specific therapy. Considering that DCL presents with a defect in the cellular immune response, this fact demonstrate that this patient may develop a regional cellular immune response enough to destroy the parasites and to produce clearing of some lesions.

Key-words: Diffuse cutaneous leishmaniasis. Spontaneous regional healing lesions. Leishmania amazonensis infection.

Diffuse cutaneous leishmaniasis (DCL) is a polar form of cutaneous leishmaniasis that in the New World is caused by *Leishmania mexicana* and *Leishmania amazonensis*. The disease is characterized by presence of disseminated nodules on the body or infiltrated plaques with only superficial and slight involvement; negative *in vivo* and *in vitro* tests for evaluation of cellular mediated immunity (CMI); a long life presence of a great quantity of parasites in lesions; high levels of specific antibodies; unresponsiveness to the usual anti-leishmanial therapy^{5 6}.

Spontaneous healing of small lesions has been referred in DCL^{1 3 4}. Here we report a case of DCL presenting with extensive regional scars and atrophic skin representing spontaneous healing of some lesions.

CASE REPORT

RNMG, 7 year old male, from the state of

Maranhão, admitted at the hospital in 1983 with three year history of infiltrated lesions throughout the body, that began as an infiltrated plaque in the anterior aspect of the left leg (Figure 1A), diffuse infiltration of the ears (Figure 2A) and nose, several nodules in the upper limbs. No other abnormalities were observed on physical examination. Intradermal skin testing with leishmania antigen was negative. A biopsy of the infiltrated plaque on the leg revealed epidermal atrophy. Unna's band and a heavy infiltration of vacuolated macrophages full of amastigotes. The patient was discharged before using the specif treatment by request of the family. He remained without medical care until 1991, when he was re-admitted. As this time he presented with a complete healing of the ear lesions (Figure 2B). In the anterior aspect of the left leg, in the same area of the previous lesion an extensive hypocromic scar was observed (Figure 1B). The lesions of the upper limbs remained and new others appeared on the face, right elbow, and left toe, associated with a diffuse infiltration of the upper lip. An *in situ* characterization using monoclonal antibodies against *L. amazonensis* yielded positive results. The specific blastogenesis and skin tests for leishmaniasis were negative. Serology by indirect fluorescent antibody test was positive (titer 1:2.048).

Departamento de Patologia, Faculdade de Medicina da Universidade Federal do Maranhão, São Luís, MA e Universidade Federal da Bahia, Salvador, BA.
Address to: Prof. Jackson M.L. Costa. Depto. de Patologia/UFMA. Pça. Madre Deus 2, 65025-560 São Luís, MA, Brasil.
Fax: (098) 222-5135.

Recebido para publicação em 12/07/94.



Figure 1A - Presence of an infiltrated plaque with small ulcers, and disseminated nodules in the anterior aspect of the left leg.



Figure 2A - The same patient, with diffuse infiltration, small ulcers, of the right ear, infiltration plaques in the nose and upper lip.



Figure 1B - The same patient after eight years, showing an extensive hypochromic scar in the anterior aspect of the leg with spontaneous healing.



Figure 2B - Showing a complete healing of ear lesions, without therapy.

DISCUSSION

DCL is considered as an anergic form of leishmaniasis, because the tests that evaluate the CMI are always negative and the parasites proliferate

undefinitely. Although, Bittencourt and Freitas¹, 1983 had shown that lymphoplasmacytic infiltration may be present with variable frequency or absent in classical DCL. They related such differences to the stage of lesion development, and lesion aspect are

not necessarily the same in all lesions of the same patient. This is also evidenced by the spontaneously healing of some regional lesions while others persist.

Spontaneous involution of small lesions has been referred in DCL^{1 3 4}; but in the present case lesions were extensive and disappeared leaving scars and atrophic skin. Bittencourt et al² have shown through histological and ultrastructural studies evidence that there is a focal and limited CMI response in DCL, insufficient to control the infection but able to promote the spontaneous regression of same regional lesions. The observation of the present case indicate that cell mediated mechanisms may operate even in extensive areas of the skin in DCL.

RESUMO

Os autores relatam um caso de leishmaniose cutânea difusa, com longa evolução e presença de lesões infiltradas difusas ricas em amastigotas havendo ausência de envolvimento mucoso. A caracterização in situ com anticorpos monoclonais revelou Leishmania amazonensis. Durante a evolução de sua doença, extensas lesões regionais apresentaram cicatrização espontânea. Considerando que a LCD apresenta-se com um déficit na resposta imune celular, este fato demonstra que o paciente pode ter desenvolvido uma resposta imune celular regional capaz de destruir os parasitas e produzir cicatrização de algumas lesões.

Palavras-chaves: Leishmaniose cutâneo-difusa. Cicatriz espontânea. Lesões regionais. Leishmania amazonensis.

REFERENCES

1. Bittencourt AL, Freitas LAR. Leishmaniose tegumentar difusa. Aspectos anatomopatológicos. *Medicina Cutânea* 11:265-270, 1983.
2. Bittencourt AL, Freitas LAR, Pompeu ML, Vieira ML, Barral A. Distinct ultrastructural aspects in different biopsies of a single patients with diffuse cutaneous leishmaniasis. *Memórias do Instituto Oswaldo Cruz* 85:53-59, 1990.
3. Bittencourt AL, Guimarães NA. Imunopatologia da leishmaniose tegumentar difusa. *Medicina Cutânea* 2:395-402, 1968.
4. Bryceson AD. Diffuse cutaneous leishmaniasis in Ethiopia. II. Treatment. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 64:369-379, 1970.
5. Convit J, Vegas K. Disseminated cutaneous leishmaniasis. *Archives Dermatology* 91:439-447, 1965.
6. Costa JML, Saldanha ACR, Silva ACM, Serra-Neto A, Galvão CES, Silva CMP. Estado atual da leishmaniose cutânea difusa (LCD) no estado do Maranhão. II. Aspectos epidemiológicos, clínicos-evolutivos. *Revista da Sociedade Brasileira de Medicina Tropical* 25:115-123, 1992.