Periungual leishmaniasis *

Leishmaniose periungueal

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Abstract: The vast majority of cases of cutaneous leishmaniasis are represented by limb injuries. A female patient, white, presented an ulcer with infiltrated borders located on the fourth finger of the left hand following occupational exposure in an area of native forest. Diagnosis of cutaneous leishmaniasis caused by *Leishmania* of the subgenus *Viannia* was confirmed. The patient failed to respond to treatment with antimony, but achieved clinical cure after this was associated with pentoxifylline. The case highlights the rarity of the periungual location of the leishmanial lesion and the difficulties encountered in therapy.
Keywords: Diagnosis; Leishmania braziliensis; Leishmaniasis, mucocutaneous; Polymerase chain reaction

Resumo: A grande maioria dos casos de leishmaniose tegumentar é representada por lesões nos membros. Paciente feminina, branca, diabética, apresentou úlcera com bordas infiltradas, localizada no quarto quirodáctilo esquerdo, após exposição ocupacional em área de mata nativa. Foi confirmado o diagnóstico de leishmaniose tegumentar por *Leishmania* do subgênero *Viannia*. Não respondeu ao tratamento com antimonial, mas obteve cura clínica após associação com a pentoxifilina. O caso destaca-se pela raridade da localização periungueal da lesão leishmaniótica e pela dificuldade terapêutica.
Palavras-chave: Diagnóstico; Leishmania braziliensis; Leishmaniose mucocutânea; Reação em cadeia da polimerase

Female, 39 years, from the state of Mato Grosso (Brazil), diabetic. Thirty days after working in a rural area presented with a periungual ulcerated infiltration in the left-hand fourth finger (Figure 1).

Leishmania was positive on histopathology, smear and culture. Indirect immunofluorescence and Montenegro skin test was positive (1:40mm and 17 mm respectively). Polymerase Chain Reaction of exudate on filter paper confirmed presence of the *Leishmania Viannia* subgenus (Figure 2). [1]

The patient was treated with N-methylglucamine (15mgSbV/kg/day) for 20 days. [2,3] Ninety days later

FIGURE 1: American periungual leishmaniasis probably caused by *Leishmania (V) braziliensis*, pre-treatment

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lesion showed incomplete healing and a new cycle of treatment combined with pentoxifylline 400mg 8/8 hours for 30 days was commenced, with resolution of the lesion (Figures 3 and 4).

The species of *L(V.) braziliensis* is endemic in the state of Mato Grosso (Brazil). [2] Refractoriness may be associated with comorbidities such as diabetes and association with pentoxifylline appears to be the best option, explained by immunological mechanisms. [4,5] The periungual location of the lesion is unusual and is most commonly reported following accidental inoculation in the laboratory. [6] ❑

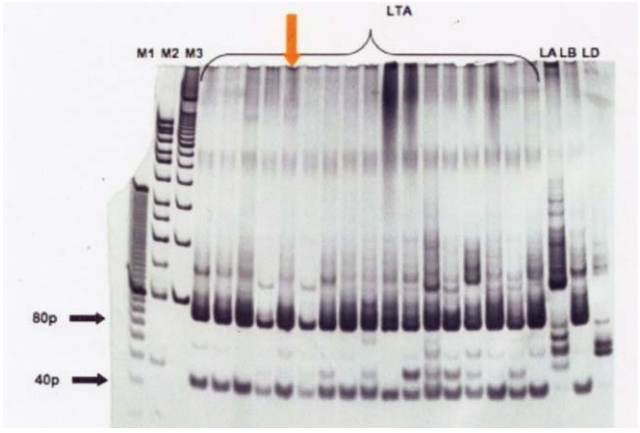

Figure 2: Polyacrylamide gel 10% showing digestion by the *HaeIII* enzyme of PCR products from the preserved area of the k-DNA minicircle gene specific for *Leishmania* and the *Viannia* subgenus. Arrow: patient sample depicted here shows two bands (80 and 40 bp), which indicates digestion by restriction endonuclease; M1: molecular weight marker 10bp, M2: molecular weight marker 50bp; M3: 100bp molecular weight marker , *L. (V.) braziliensis* (LB) *L. (L.) amazonensis* (LA); *L. donovani chagasi* (LD)

Figure 3: American periungual leishmaniasis, caused by *Leishmania (V) braziliensis*, 20 days after treatment with N-methylglucamine

Figure 4: American periungual cutaneous leishmaniasis, caused by *Leishmania (V) braziliensis* after the second cycle of treatment with N-methylglucamine 15mgSbV/Kg/day associated with pentoxifylline 400 mg 8/8 hours for 30 days

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