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Case study

Visceral leishmaniasis with cutaneous involvement caused by *Leishmania infantum-chagasi*

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ABSTRACT

We report the case of a 66 year-old woman who presented nodular skin lesions on her back and upper extremities. Biopsy revealed amastigotes that were identified as *Leishmania infantum-chagasi* by PCR. Evaluation also showed hepatomegaly and pulmonary nodules. Treatment with amphotericin B led to complete resolution of skin lesions.

66-year-old woman presented with nodular skin lesions for 10 years. The patient was originally from Cuba and moved to the U.S.A two years ago. The lesions started on her shoulders and upper back and spread to her arms and hands. Each lesion was about 1 cm in diameter, maculo-nodular, non- tender, pruritic and mainly scattered around upper extremities and upper back (Fig. 1a–c). Skin biopsy revealed amastigotes, which were later identified as *Leishmania infantum-chagasi* by PCR (Fig. 1d). Evaluation also showed hepatomegaly and multiple sub-centimeter pulmonary nodules. Treatment with liposomal amphotericin B was given (total dose 21 mg/kg). At 1-month follow-up, skin lesions completely resolved.

Leishmania infantum-chagasi is an Old World form of leishmaniasis most commonly associated with visceral involvement, and less frequently with cutaneous manifestations. [1]. Most cases of *L. infantum-chagasi* with cutaneous involvement tend to have small slow growing nodular lesions with a low tendency for spontaneous remission [2]. It is always important to exclude visceral involvement since untreated cases may lead to life threatening complications especially in immunosuppressed patients [2,3]. Several topical and systemic treatment options are available with systemic choices reserved for severe disease or visceral involvement, and include pentavalent antimonials, liposomal amphotericin b and pentamidine [4].

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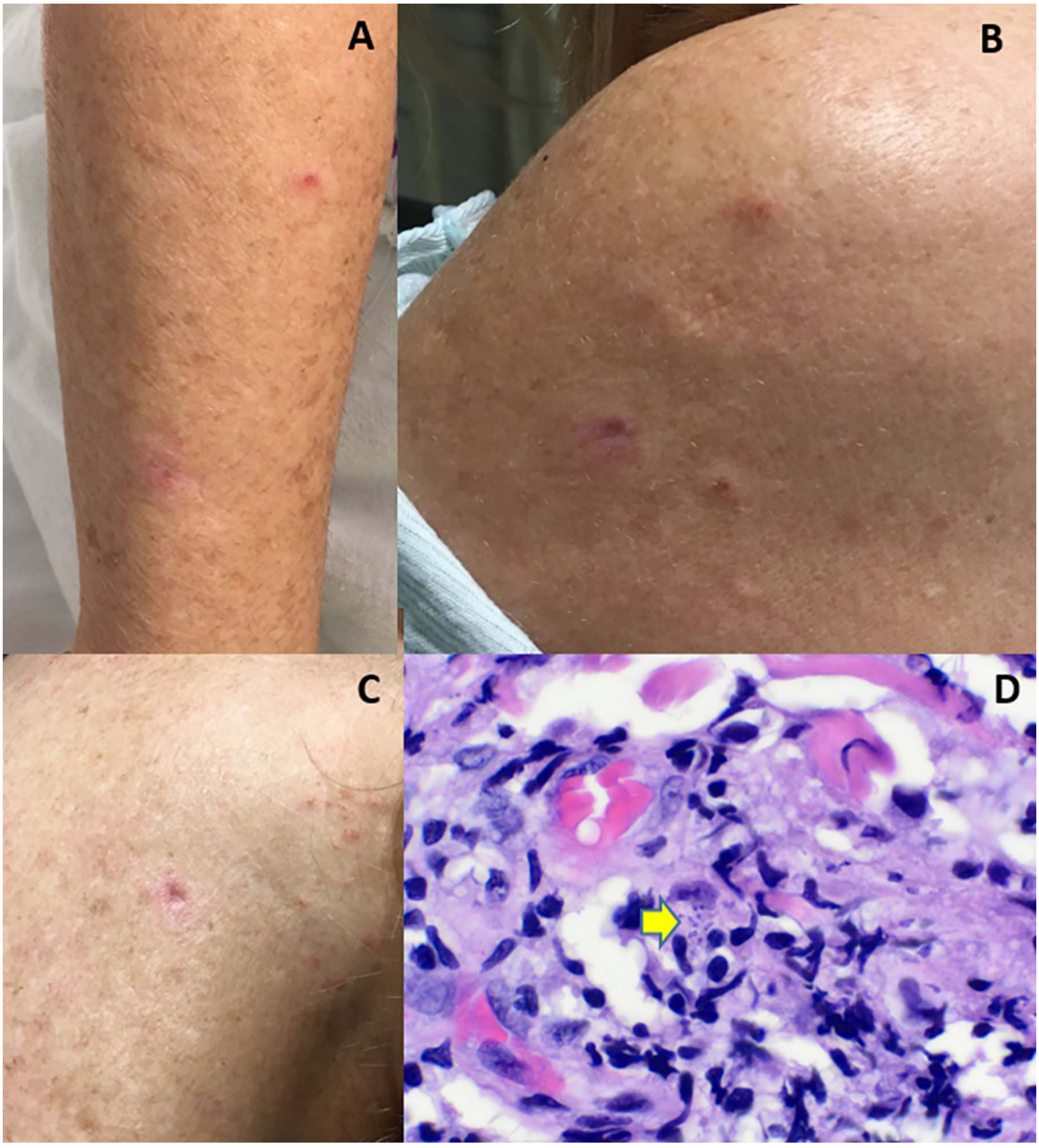

Fig. 1. (A–C) Multiple maculo-nodular skin lesions of 1 cm in diameter in arms, shoulder and upper back. (D) Histology from skin biopsy showing amastigotes (H&E, 200X).

Conflict of interest

None of the authors reports a conflict of interest, and there were no funding sources.

References

[1] Del Giudice P, Marty P, Lacour JP, Perrin C, Pratlong F, Haas H, et al. Cutaneous leishmaniasis due to Leishmania infantum: case reports and literature review. Cutaneous Arch Dermatol 1998;134(2):193–8.
[2] Kroidl A, Kroidl I, Bretzel G, Löscher T. Non-healing old world cutaneous leishmaniasis caused by L. infantum in a patient from Spain. BMC Infect Dis 2014;14:206.
[3] Bailey MS, Lockwood DN. Cutaneous leishmaniasis. Clin Dermatol 2007;25(2):203–11.
[4] Morizot G, Kendjo E, Mouri O, Thellier M, Pérignon A, Foulet F, et al. Cutaneous Leishmaniasis French Study Group: travelers with cutaneous leishmaniasis cured without systemic therapy. Clin Infect Dis 2013;57(3):370–80.