A differential to consider in a case of non-healing skin lesion

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DESCRIPTION

We report a case of a 5-year-old Asian boy with an 8-month history of non-healing lesions on the left side of cheek (figure 1).

It started as a non-tender red papule which increased to a pea-sized nodule over a period of few weeks. The lesion persisted for over 6 months and was oozing pus intermittently. At the same time two other erythematous papules appeared under the chin.

He had travelled to Pakistan a year before the lesions appeared. His family members did not have tuberculosis.

A punch biopsy of the lesion revealed a non-caseating granuloma (figure 2). Stain and cultures for bacteria, acid-fast bacilli and fungi were negative. The Mantoux test was negative and the chest radiograph was normal. His renal, liver function, C reactive protein and erythrocyte sedimentation rate were normal. Serum immunoglobulins and lymphocyte subsets were normal. *Leishmania donovani* DNA complex was detected on PCR and confirmed a diagnosis of cutaneous Leishmaniasis. Ultrasound of the neck and abdomen did not show any lymphadenopathy or hepatosplenomegaly. He responded well to oral fluconazole (10 mg/kg) treatment for 2 months.

Cutaneous leishmaniasis is a parasitic skin infection caused by *Leishmania* species, which is transmitted by sandfly bites.¹ Papules are the most common clinical presentation in the initial stages.² They can also present as plaques, nodule or

Figure 1 Lesion on the face.

Figure 2 Histopathology of skin lesion.

ulcers. Face is the most common affected area.² Microscopy and culture have low sensitivity in the diagnosis of leishmaniasis.¹ However, a molecular diagnosis by PCR is highly sensitive and specific for detecting the DNA of the *Leishmania* species.¹

Learning points

- ▶ Cutaneous leishmaniasis should be considered in the differential diagnosis of non-healing skin lesions when the biopsy shows granulomatous inflammation with negative stains and culture for tuberculosis.
- ▶ In such cases, *Leishmania* PCR is a very sensitive and specific molecular diagnostic test in the absence of confirmatory histological diagnosis.

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