# 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.<sup>1</sup> Papules are the most common clinical presentation in the initial stages.<sup>2</sup> They can also present as plaques, nodule or



Figure 1 Lesion on the face.



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

## **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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#### REFERENCES

- Singh S, Sivakumar R. Recent advances in the diagnosis of leishmaniasis. J Postgrad Med 2003;49:55–60.
- 2 Layegh P, Moghiman T, Ahmadian Hoseini SA. Children and cutaneous leishmaniasis: a clinical report and review. J Infect Dev Ctries 2013;7:614–17.



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