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Suspicious Skin Lesion in an 11-Year-Old Male

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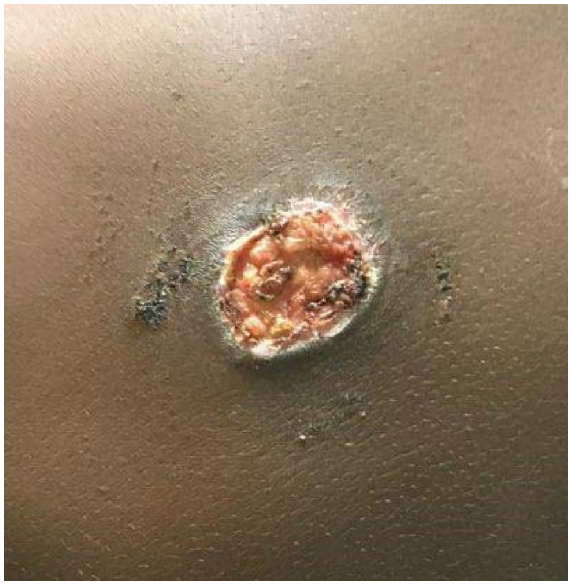

History of present illness: An 11-year-old male presented to the emergency department (ED) in southern Texas with a worsening circular skin lesion on his back. The lesion was noted three weeks prior to presentation after a day at the park "splash pad." Despite application of a topical antifungal, the lesion expanded and developed scant yellow drainage with tenderness. His primary physician prescribed cephalexin for a staphylococcal infection based on a wound culture but referred the patient to the ED given continued progression of the lesion. He had no other associated symptoms. No travel history, animal exposures, or tuberculosis contacts were identified. He had normal vital signs for age.

Significant findings: The patient had a 5 cm ulcerative lesion with raised borders and a yellow, "fatty" center. There was no active drainage, site tenderness, or lymphadenopathy.

Discussion: On ED evaluation, dermatology and infectious disease consultants felt the lesion was consistent with localized cutaneous leishmaniasis (LCL), which is endemic to southern Texas.[1] Parasites of the

Leishmania species are the causative organisms and sandflies are the known vector.[2] LCL often manifests as a well-defined ulcer with an indurated or erythematous border.[3,4] Diagnosis is suggested by clinical and epidemiological features but is confirmed by parasite identification. In endemic regions, the recommended diagnostic test is amastigote visualization by microscopy. Alternative methods include culture, histopathology, and molecular testing.[5] Recent literature reports high sensitivity of polymerase chain reaction (PCR) testing for diagnosis of LCL, particularly when used in combination with conventional methods.[4,6-7]

The differential diagnosis also included infection secondary to *Staphylococcus spp*., *Mycobacterium spp*., and fungi (eg *Sporothrix* or *Blastomyces spp*.). Tissue cultures ultimately indicated clindamycin resistant, methicillin sensitive *Staphylococcus aureus* (MSSA). Pathology revealed a lymphoplasmacytic infiltrate and fat necrosis. *Leishmania* PCR and DNA sequencing, real time-PCR, and microscopy were negative. The patient was treated with sulfamethoxazole/trimethoprim, but the patient did not return to seek additional care, so it is uncertain if the lesion resolved with this treatment.

Topics: Pediatric, ulcerative lesion, staphylococcus aureus, localized cutaneous leishmaniasis.

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