Consultant360 Multidisciplinary Medical Information Network

PHOTOCLINIC

PEER REVIEWED

Cutaneous Leishmaniasis

AUTHORS:

Laure Cundiff, BS

Third-Year Medical Student, Texas A&M University College of Medicine, Houston, Texas

Richard L. Byrd, MD

Clinical Assistant Professor, Texas A&M University College of Medicine, Houston, Texas; Pediatri Seybold Clinic, Houston, Texas

Catherine M. Short, RN, BSN, CWOCN

Houston Methodist Hospital, Houston, Texas

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During a medical mission to the indigenous Cabécar people of Costa Rica, a 9-year-old girl prese concern of fleabites of several months' duration. On physical examination, the girl was noted to ha painless ulcerations of her left forearm (**Figure 1**), right upper arm (**Figure 2**), and chin (**Figure 3**

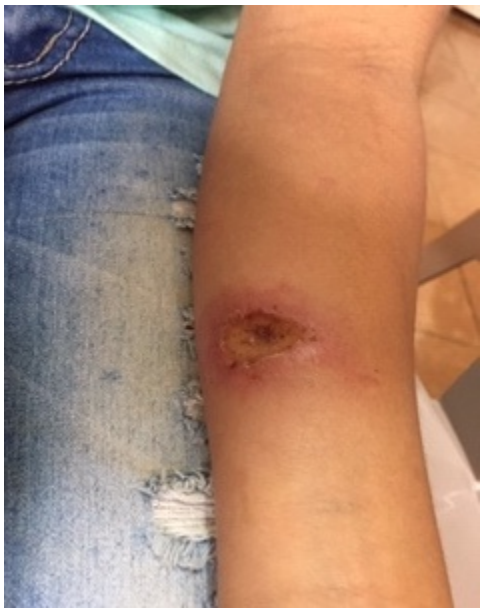

Figure 1. *Ulceration on the patient's left forearm (photo by Richard L. Byrd, MD).*

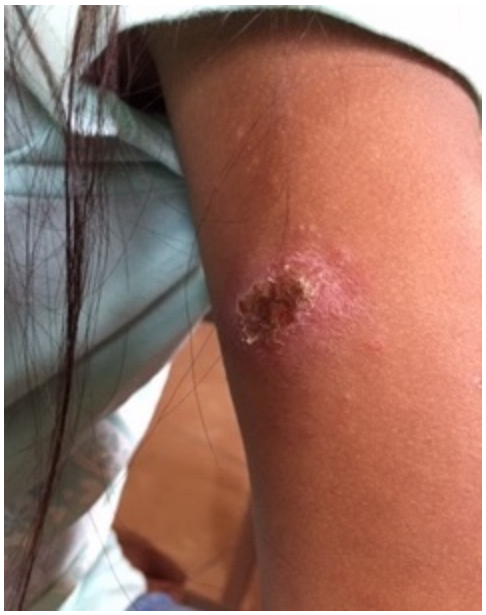

Figure 2. *Ulceration on the patient's right upper arm (photo by Richard L. Byrd, MD).*

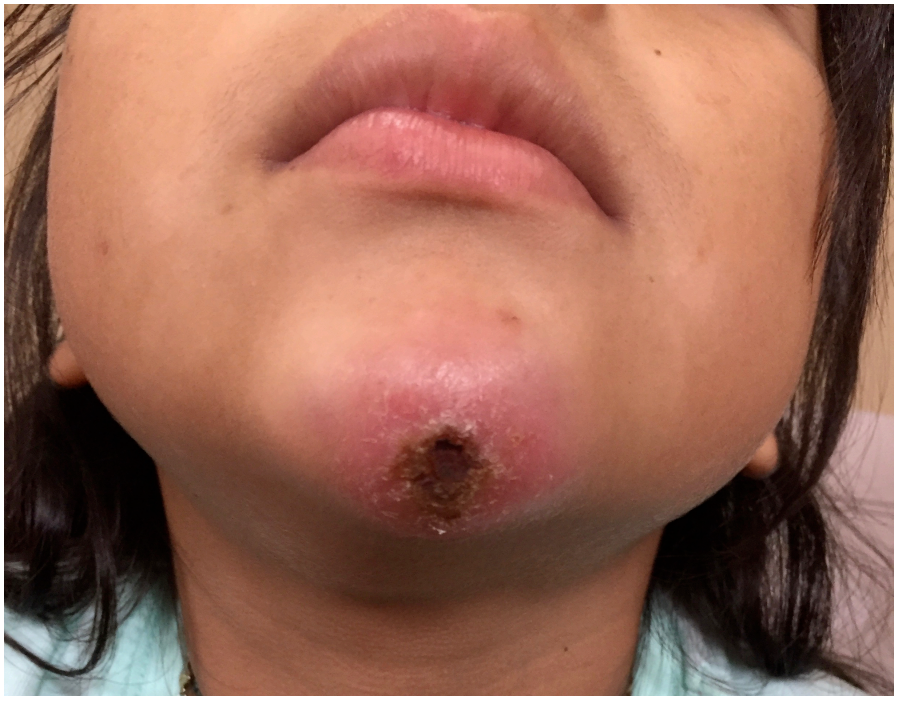

Figure 3. *Ulceration on the patient's chin (photo by Richard L. Byrd, MD).*

A clinical diagnosis of cutaneous leishmaniasis was made. The girl was given a 10-day course of suspected secondary infection of the lesions and was referred to the state health department for diagnosis and further treatment.

EPIDEMIOLOGY

Leishmaniasis is a vector-borne parasitic disease endemic to 98 countries worldwide. It is primari tropical regions of Southern Europe, Northern Africa, the Middle East, Central and South America subcontinent.[1,2] With an estimated global annual incidence rate of between 0.9 million and 1.7 mi leishmaniasis remains one of the most common neglected tropical diseases.[2] The Centers for Dis Prevention reports isolated cases of leishmaniasis originating in Texas and Oklahoma, although t

not typically arise in the United States. However, cases may be diagnosed in travelers, immigrant personnel upon their return to the United States and therefore remains an important clinical consi

The causative organism is the protozoan *Leishmania*. At least 20 species of *Leishmania* have bee causing a range of clinical manifestations in different geographical areas.[1] The parasite is transm infected *Phlebotomus* sand flies, with more than 98 species of this vector having been identified.[2] canines, and humans serve as the primary reservoirs of *Leishmania*, and thus this disease under zoonotic (animal-to-human) and anthroponotic (human-to-animal) transmission when female sand meals from their mammalian hosts.[2]

Three clinical syndromes are possible, depending on the *Leishmania* species. Once inside the ho promastigote develops into an amastigote within macrophages of the skin, causing the cutaneous disease.[2] Mucosal leishmaniasis can evolve from dissemination of the parasite from the skin to th naso-oropharyngeal mucosa, which can erode the nasal cartilage and produce a disfiguring scar. development occurs within the reticuloendothelial system of the spleen, liver, and bone marrow, th of leishmaniasis (kala-azar) occurs.[2] (This review focuses primarily on the diagnosis and treatmer manifestations, as seen in our patient.)

DIAGNOSIS

Cutaneous leishmaniasis most commonly presents with a painless papule developing at the site o It increases in size and eventually crusts and ulcerates.[1] Lesions may develop between 2 weeks months after the initial bite; some people never develop clinical manifestations.[1] Laboratory evalu necessary to rule out other etiologies (**Table**).[3,4]

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