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DERMATOLOGIC THERAPY WILEY

LETTER

Solitary cutaneous leiomyoma mimicking leishmaniasis

Dear Editor,

Cutaneous leiomyomas are benign neoplasms arising from the arrector pili muscle. They make up about 5% of all leiomyomas.[1] Clinically, they appear as red, brown colored, single or multiple papules, nodules and plaques. They may demonstrate pain and sensitivity due to physical and mechanical stimuli such as touch, pressure, and cold.[2] Dermatofibroma, angiolipoma, eccrine spiradenoma, glomus tumor, lipoma, neurofibroma, smooth muscle hamartoma, sebaceous, and epidermoid cysts should be considered in the differential diagnosis of solitary leiomyomas.[2] In the presence of multiple lesions, patients should be investigated for hereditary leiomyomatosis renal cell cancer syndrome (HLRCC), which may also be accompanied by uterine leiomyomas.[3]

A 33-year-old woman presented with a complaint of red swelling in her left forearm that had been growing for the past 5 months. In the dermatological examination, a 1.5 cm erythematous nodule with an adherent crust was observed on the left dorsal forearm (Figure 1). Evolution of the lesion over 20 weeks was photographed by our patient prior to admission to our clinic (Figure 2). For the microscopic examination with a preliminary diagnosis of leishmaniasis, the crust on the lesion was removed and a swab sample was taken. DIFF-quick staining method, which consists of a fixative agent (methanol, blue), solution I (eosinophilic, orange), and solution II (basophilic, blue), was applied to the sample. No feature was detected in cytological evaluation. Excisional biopsy was performed. Histopathological examination revealed hypertrophic smooth muscle bundles in the dermis that did not show atypia and mitosis in sections painted with H&E. Vascular structures surrounding smooth muscle bundles were not observed. Therefore, the piloleiomyoma subtype was considered. In immunohistochemical examination, structures with K67 low proliferation showed positive SMA (Smooth muscle antibody) staining and negative CD34 staining (Figure 3). With these findings, a diagnosis of cutaneous piloleiomyoma was made.

In our case, the lesion appeared as a pinkish papule. In different stages of lesion development, findings such as squam, haemorrhagic crust, eczematization and secondary impetiginization were observed (Figure 2). It was thought that eczematization seen in different stages of lesion development may be caused by irritant or allergic reactions due to different topical agents that the patient may have applied to the lesion with the thought that she can treat it. The findings such as impetiginization and hemorrhagic crust were estimated to be caused by the patient's traumatization of the lesion. The diagnosis of cutaneous leishmaniasis was considered at the forefront because our patient was living in one of our southeastern provinces where leishmaniasis was endemic. In addition, the clinical appearance of the lesion, its duration, and the body's exposed skin area also caused us to think of leishmaniasis.

A case mixed with leishmaniasis has been reported in the literature so far. Pileri et al. stated that the nodular lesion with central ulceration was confused with leishmaniasis. In histopathological examination, they observed that mitotic figures increased especially in the ulcerated region.[4] It can be said that physicians should be vigilant in terms of malignant transformation especially in the presence of findings such as ulceration on the lesion.

In conclusion, it should be kept in mind that cutaneous leiomyomas can be confused with many tumoral and infectious diseases of the skin.

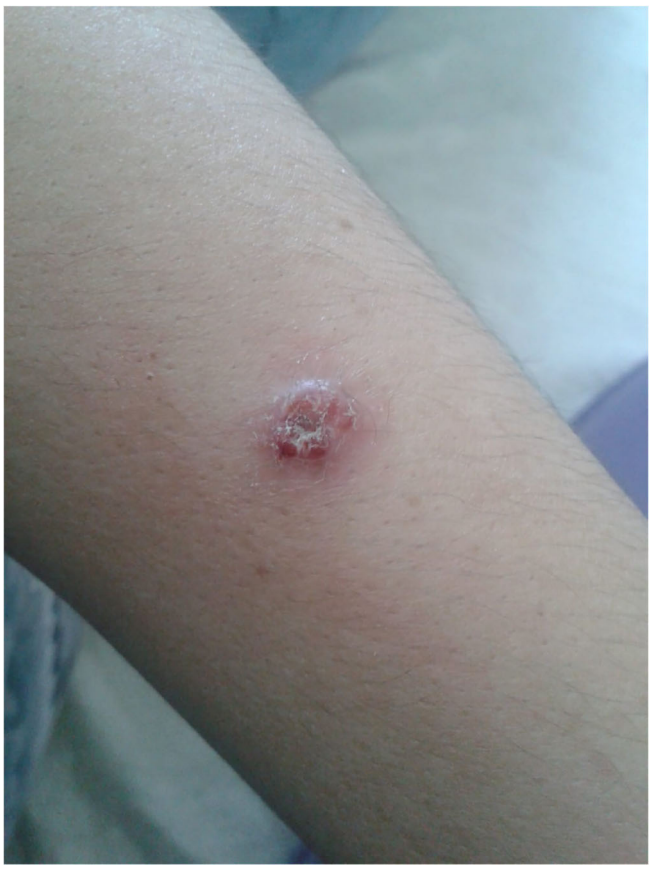

FIGURE 1 The appearance of the lesion of the patient at the time of admission (week 20)

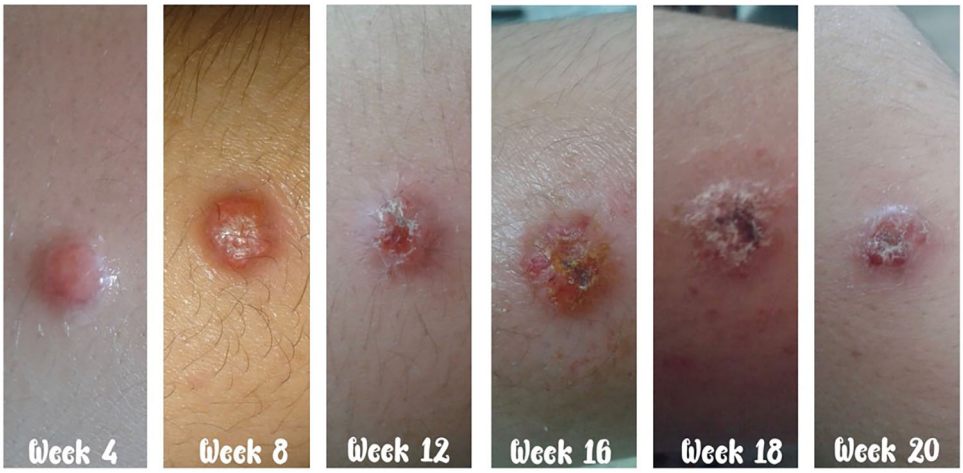

FIGURE 2 Evolution of lesion until admission

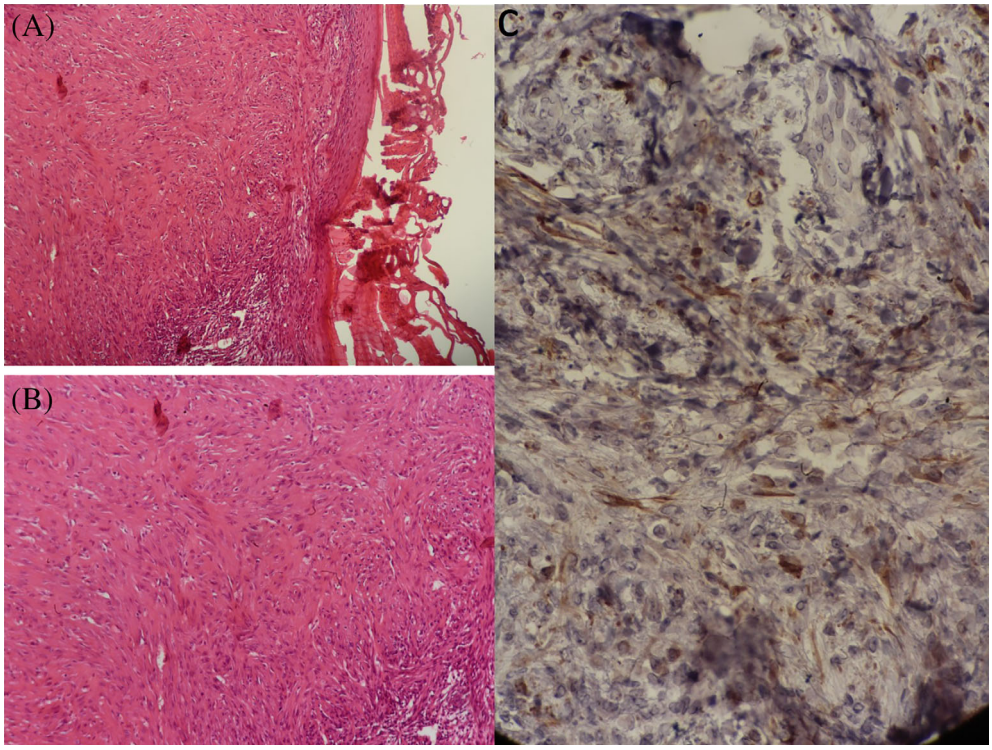

FIGURE 3 Histopathological features of excised tumor. A, Well-limited tumor forming fascicles in the dermis with H&E (×20); B, Tumor cells with spindle-like mitosis and atypia without spindle cytoplasm with H&E (×40); and C, Positive staining with SMA in tumor cells by immunohistochemical method (×40)

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