

Cutaneous Leiomyoma Mimicking Molluscum Contagiosum

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Introduction

Cutaneous leiomyomas are benign, often painful, neoplasms arising from the smooth muscle [1]. The main differential diagnosis includes other painful cutaneous lesions such as angioliipoma, neuroma, blue rubber bleb nevus, cutaneous endometriosis, glomus tumor, and granular cell tumor [2]. We present a case of a cutaneous leiomyoma misdiagnosed as molluscum contagiosum.

Case Presentation

In March 2023, a 23-year-old man presented to our attention for a newly growing lesion on his left thigh. On clinical examination, the lesion showed a translucent aspect, with a mild central depression and hard elastic consistency at palpation (Figure 1A). At dermoscopy, the lesion appeared as a smooth pink papule covered with fine scales in the center.

Peripherally, a circular brownish structureless area and some glomerular vessels were detected (Figure 1B). The patient referred the zone around the papule to be mildly painful when touched, and sensitive especially after exposure to cold temperatures.

When asked about the onset of this lesion, the patient told us that it had appeared for the first time almost a year before (January 2022). Since then, it had showed no significant growth or symptoms, leaving the patient unconcerned. He sought a dermatologist's attention only after some months, in November 2022. The first dermatologist made a diagnosis of molluscum contagiosum and treated this papule with curettage. After four months, the lesion grew back, showing the exact same features it had had prior to the curettage, and the patient presented to our clinic to be visited by another specialist.

At this point, given the history of recurrence of the lesion, and a clinical/dermoscopic uncertainty, an excisional

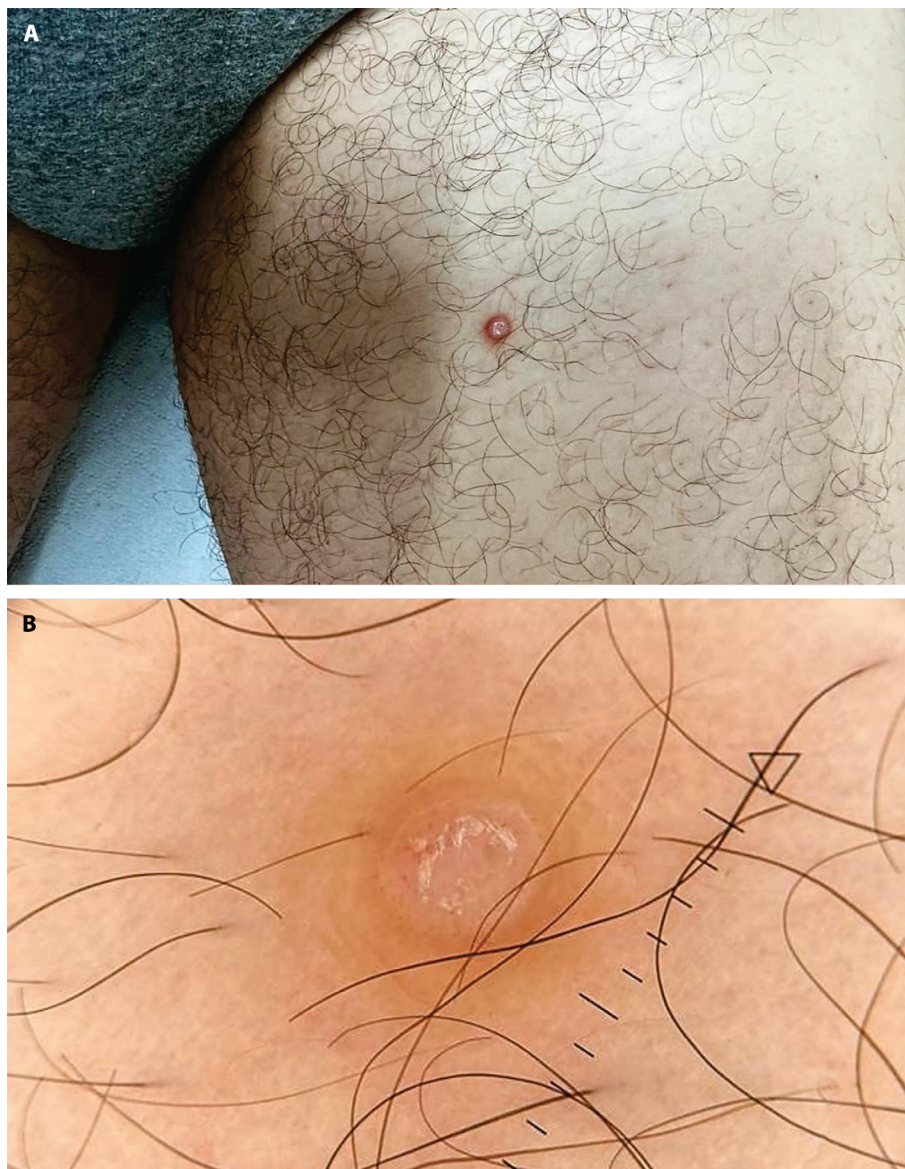


Figure 1. (A) Clinical picture of the lesion showing a translucent pink papule with a mild central depression. (B) Dermoscopic image shows a pink papule covered with fine scales in the center. Peripherally, a circular brownish structureless area and some glomerular vessels are visible.

biopsy with histopathological report was planned, with the clinical suspicion of an adnexal or mesenchymal tumor. The histopathological examination revealed a neoplasm located in superficial and deep dermis. The dermal neoplastic proliferation was arranged in interlacing bundles (Figure 2A). Spindle-shaped neoplastic cells were present, with eosinophilic cytoplasm and oval nuclei; collagen fibers were intermingled (Figure 2B). The neoplastic cells stained positive for smooth-muscle actin immunohistochemistry (Figure 2C).

All these findings, according to morphological data, suggested the diagnosis of leiomyoma, excluding that of leiomyosarcoma and the original hypothesis of molluscum contagiosum.

A short 4-month follow-up was then planned to exclude a new recurrence of the lesion or the appearance of other leiomyomas in different body sites.

Conclusions

This case illustrates the clinical challenge of managing solitary pink papules/ nodules. Even though the dermoscopy and clinical image of this case lesion could lead to suspecting a molluscum contagiosum, the symptoms reported by the patient could have helped the clinician not to miss this diagnosis. Given the usual presence of its associated symptomatology, leiomyoma is not usually considered among the differential diagnosis of molluscum contagiosum [3]; however, in the literature there are reported cases of misdiagnosed leiomyomas with other asymptomatic lesions like keloids [4]. An interventional approach through shaving/ excisional biopsy with a histopathological report should always be considered, especially in adults presenting with solitary pink papules.

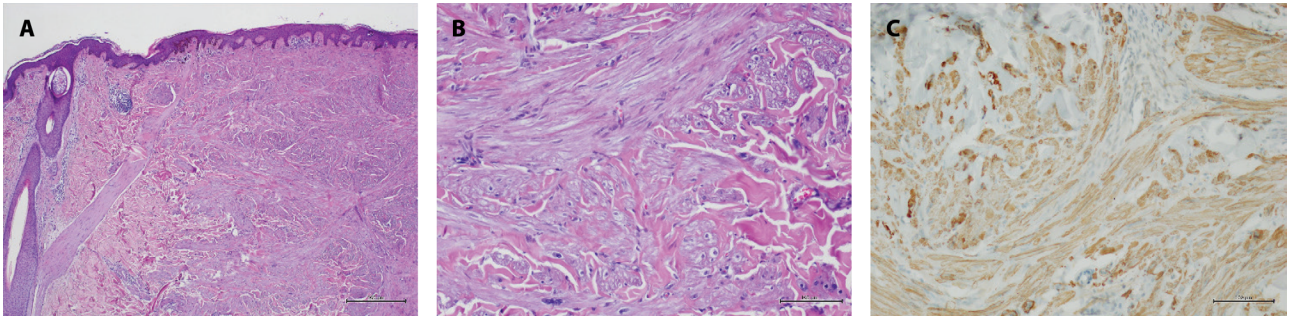


Figure 2. (A) A poorly demarcated dermal neoplastic proliferation arranged in interlacing bundles; a pilar muscle is present on the left side (hematoxylin and eosin stain, original magnification 40x). (B) Neoplastic cells are spindle-shaped, with eosinophilic cytoplasm and oval nuclei; collagen fibers are intermingled (hematoxylin and eosin stain, original magnification 200x). (C) The neoplastic cells stained positive for smooth-muscle actin immunohistochemistry (immunohistochemical stain, original magnification 200x).

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