

Figure 1: (a and b) Reddish papule with a scaly surface and a clear-cut keratotic border, located on the sole. (c) Polarized light dermoscopy with immersion fluid showing a pink homogeneous area and an ivory halo around the entire lesion. Multiple round-to-oval reddish structures surrounded by a white halo and dotted vessels may also be seen (original magnification, ×10)

are occasionally seen, mimicking the red lacunae typical of vascular lesions, such as hemangioma or pyogenic granuloma. Milky-red areas, commonly found in melanoma, may also be present.<sup>[2]</sup> Pigmented globule-like structures, comedo-like openings, as well as blue-gray ovoid nests, arborizing vessels, and maple leaf-like structures similar to those of pigmented basal cell carcinomas are also described in pigmented variants of eccrine poroma.<sup>[3,4]</sup> The dermoscopic findings described in previous reports of eccrine poroma have been summarized by Lallas *et al.*<sup>[5]</sup>

Eccrine poroma may exhibit polymorphic features that can make diagnosis difficult. The clinical and dermoscopic differential diagnoses include, among others, pyogenic granuloma, hemangioma, seborrheic keratosis, melanocytic nevus, amelanotic melanoma, and basal cell carcinoma.<sup>[6]</sup>

> Bruno Simão dos Santos Dermatologic clinic, Rua Miguel de Frias, 40, Niterói - Rio de Janeiro, Brazil

Address for correspondence: Dr. Bruno Simão dos Santos, Dermatologic clinic, Rua Miguel de Frias, 40, Niterói - Rio de Janeiro, Brazil. E-mail: b.simao@ymail.com

### REFERENCES

- 1. Moore TO, Orman HL, Orman SK, Helm KF. Poromas of the head and neck. J Am Acad Dermatol 2001;44:48-52.
- Ferrari A, Buccini P, Silipo V, De Simone P, Mariani G, Marenda S, *et al.* Eccrine poroma: A clinical-dermoscopic study of seven cases. Acta Derm Venereol 2009;89:160-4.
- Kuo HW, Ohara K. Pigmented eccrine poroma: A report of two cases and study with dermatoscopy. Dermatol Surg 2003;29:1076-9.
- Minagawa A, Koga H. Dermoscopy of pigmented poromas. Dermatology 2010;221:78-83.
- Lallas A, Moscarella E, Argenziano G, Longo C, Apalla Z, Ferrara G, et al. Dermoscopy of uncommon skin tumours. Australas J Dermatol 2014;55:53-62.
- Altamura D, Piccolo D, Lozzi GP, Peris K. Eccrine poroma in an unusual site: A clinical and dermoscopic simulator of amelanotic melanoma. J Am Acad Dermatol 2005;53:539-41.



# Recurrent cutaneous leiomyosarcoma of the inner thigh

## Sir,

A 55-year-old African male from Senegal presented with a large nodular lesion on the inner surface of the left thigh [Figure 1]. The lesion had first appeared 8 years ago, had been interpreted as a keloid and excised twice once 6 years ago and again 3 years ago in Senegal without any histological examination. Clinically, the lesion measured  $45 \times 55$  mm, was hard in consistency, moved easily over the deep subcutaneous planes, and seemed to comprise of separate, coalescing nodules. The overlying epidermis was adherent. Bilateral inguinal lymph nodes were palpable but normal. Patient reported feeling a stabbing pain in the nodule. Complete blood examination, human immunodeficiency virus antibodies, hepatitis markers, and human herpesvirus 8 polymerase chain reaction (PCR) from blood showed no abnormalities.



Figure 1: The nodular aspect of the tumor is clearly visible

Mycobacterial polymerase chain reaction from the skin biopsy specimen was also negative.

Histology showed a dermal neoplasm partially extending into the underlying subcutaneous tissue, with a nodular growth pattern, consisting of a highly cellular tumor composed of interlacing bundles of spindle cells with eosinophilic cytoplasm and typical blunt ended nuclei [Figure 2a and b]. The tissue involvement ratio was >90% dermal and <10% subcutaneous. Tumor cells demonstrated nuclear hyperchromasia, pleomorphism and readily identified mitoses, equivalent to 3 per 10 high-power fields. Further, they showed consistent intra-cytoplasmic immunoreactivity for desmin, vimentin, smooth muscle actin [Figure 2c], and actin HHF-35. More than 20% tumor cells displayed nuclear anti-Ki 67 (MIB 1) positivity. Immunoreactivities for S-100 protein, CD31 and CD34 were not detected in tumor cells. Based on the histological findings, we made a diagnosis of primary dermal leiomyosarcoma. In order to assess the local extension of the lesion, as well as possible systemic involvement, a left leg magnetic resonance imaging and a total body computed tomography scan were performed. The magnetic resonance imaging revealed a suprafascial nonhomogeneous mass measuring  $47 \times 58$  mm. The computed tomography scan demonstrated no sign of metastasis.

Cutaneous leiomyosarcoma is a malignant neoplasm arising from smooth muscle which affects individuals of all ages and especially between the fifth and seventh decade of life.<sup>[1]</sup> It may be subdivided into two main categories: primary and secondary. The former is rare, accounts for 2–3% of all superficial soft tissue sarcomas and includes two subtypes: dermal and subcutaneous, according to the predominantly involved tissue.<sup>[1]</sup> This

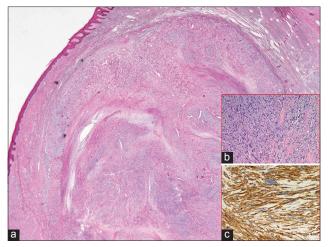


Figure 2: (a) The cutaneous neoplasm displays a nodular growth pattern (H and E,  $\times$ 10); (b) interlacing bundles of spindle cells (H and E,  $\times$ 100); (c their immunoreactivity to smooth muscle actin (SMA) (Immunoperoxidase stain,  $\times$ 200). Note the nuclear pleomorphism

implies prognostic significance as the dermal variant is a locally aggressive tumor with frequent recurrence (30–50% of cases) but it very unusually metastasizes, while the subcutaneous variant is associated with a higher percentage of metastasis and recurrence rates (50–70% of cases).<sup>[2,3]</sup> Dermal leiomyosarcoma may involve different anatomical sites: 50–75% of cases occur on the lower limbs, predominantly on the thigh, 20–30% on the upper limbs, 10–15% on the trunk and less than 5% on the face.<sup>[2,4]</sup> Trauma and radiation exposure have been indicated as predisposing factors.

Clinically, it can be misinterpreted as a keloid, a granulomatous lesion (such as cutaneous tuberculosis or another mycobacteriosis, cutaneous deep fungal infection, cutaneous sarcoidosis) or a neoplastic lesion both benign (epidermoid cyst, dermatofibroma, lipoma, fibroma, leiomyoma, neurofibroma) and malignant (basal cell and squamous cell carcinoma, melanoma, Kaposi sarcoma as well as other sarcomatoid tumors, notably dermatofibrosarcoma protuberans). Histologically, it has to be differentiated from fibrosarcoma, melanoma, malignant peripheral nerve sheath tumor, synovial sarcoma, malignant fibrous histiocytoma, the spindle cell variant of squamous cell carcinoma and dermatofibrosarcoma protuberans.<sup>[5]</sup> Immunoistochemistry (smooth muscle actin, desmin, vimentin, cytokeratins, and S-100 protein) should be used. As a rule, expression of smooth muscle actin, desmin and vimentin by tumour cells and negativity for the remaining markers permits a differentiation from the above mentioned neoplasms.<sup>[3,4]</sup> In particular, dermatofibrosarcoma protuberans was excluded in our case because neoplastic cells were CD34 negative, not arranged in a storiform pattern and the mitotic activity was very high. Guidelines for surgical intervention are not clearly defined. Recommended excision margins range from 3 to 5 cm (down to the fascia) and there are no recommendations on follow-up.<sup>[4]</sup> Local excision performed without adequate margins leads to recurrence, as had been the case with our patient.

In conclusion, primary dermal leiomyosarcoma represents a very rare entity. It should be suspected by the clinician assessing a nodular cutaneous lesion, especially in case of previous trauma or radiation, as well as by the pathologist facing a cutaneous malignant spindle cell neoplasm.

# Domenico Bonamonte, Michelangelo Vestita, Angela Filoni, Giuseppe Ingravallo<sup>1</sup>, Pasquale Sportelli<sup>2</sup>

Section of Dermatology, Department of Biomedical Science and Human Oncology, <sup>1</sup>Section of Pathological Anatomy, Department of Emergencies and Organ Transplantation, <sup>2</sup>Section of Plastic and Reconstructive Surgery, Department of Emergencies and Organ Transplantation, University of Bari, 11, Piazza Giulio Cesare, 70124, Bari, Italy

> Address for correspondence: Dr. Michelangelo Vestita, Resident physician in Dermatology, 11, Piazza Giulio Cesare, 70124, Bari, Italy. E-mail: michelangelovestita@gmail.com

#### REFERENCES

- Jensen ML, Jensen OM, Michalski W, Nielsen OS, Keller J. Intradermal and subcutaneous leiomyosarcoma: A clinicopathological and immunohistochemical study of 41 cases. J Cutan Pathol 1996;23:458-63.
- Tsutsumida A, Yoshida T, Yamamoto Y, Itoh T, Minakawa H, Sugihara T. Management of superficial leiomyosarcomas: A retrospective study of 10 cases. Plast Reconstr Surg 2005;116:8-12.
- 3. Bellezza G, Sidoni A, Cavaliere A, Scheibel M, Bucciarelli E. Primary cutaneous leiomyosarcoma: A clinicopathological and immunohistochemical study of 7 cases. Int J Surg Pathol 2004;12:39-44.
- 4. Porter CJ, Januszkiewicz JS. Cutaneous leiomyosarcoma. Plast Reconstr Surg 2002;109:964-7.
- Annest NM, Grekin SJ, Stone MS, Messingham MJ. Cutaneous leiomyosarcoma: A tumour of the head and neck. Dermatol Surg 2007;33:628-33.

Access this article online	
Quick Response Code:	Website:
	www.ijdvl.com
	DOI: 10.4103/0378-6323.155565

# Cutaneous involvement of marginal zone B-lymphoma noted after topical imiquimod; more than a coincidence?

### Sir,

Topical imiquimod is a toll-like receptor (TLR) 7/8 agonist approved for the treatment of non-melanoma skin cancer (NMSC). Its side effects are usually local and less frequently systemic.<sup>[1]</sup> We report a case of secondary marginal zone B-lymphoma (MZL) that involved the areas where topical imiquimod was applied to treat actinic keratoses and superficial basal cell carcinomas.

An 84-year-old male presented with persistent superficial basal cell carcinomas (BCC) and actinic keratosis (AK) on both cheeks [Figure 1]. were previously treated with surgery These and methyl-aminolevulinate photodynamic therapy (MAL-PDT). However, since some lesions were not responding to photodynamic therapy, it was decided to try topical imiquimod in order to avoid another surgical procedure. Six weeks after initiating the treatment, the patient developed erythematous and edematous plaques on both cheeks [Figure 2]. There was associated cervical lymphadenopathy. Skin biopsy showed aggregates of small and medium sized lymphocytes with some plasma cells occupying the whole dermis; there was neither formation of germinal centers nor evidence of epidermotropism [Figure 3]. The immunohistochemical study was strongly positive for CD20 [Figure 2], CD79a, BCL2 and light chain restriction, with decreased expression of CD3, CD4, CD 123 and UCH L1, and negative for CD8, CD5 and CD10.

Immunophenotyping of peripherial blood revealed that 38% of B lymphocytes had a marginal zone immunophenotype and 14% of bone marrow lymphocytes presented with a condensed chromatin pattern and small nucleoli. Upper gastrointestinal endoscopy was normal. Thoracic, abdominal and pelvic computed tomography showed a small, 7 mm nodule lower lobe of the right lung. The patient and his family declined further invasive tests. Considering all these findings, and in accordance with the definition of the WHO-EORTC,<sup>[2]</sup> we made the diagnosis of Copyright of Indian Journal of Dermatology, Venereology & Leprology is the property of Medknow Publications & Media Pvt. Ltd. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.