Asymptomatic Digital Angioleiomyoma

J del Olmo, M Marquina, and P Redondo
Departamento de Dermatología, Clínica Universitaria de Navarra, Facultad de Medicina, Universidad de Navarra, Pamplona, Spain

To the Editor:

Angioleiomyomas that present with no symptoms are extremely rare, except when located on the head and neck.[1]

Three cutaneous variants of this tumor have been described: piloleiomyoma, which originates in the erector pili muscle; angioleiomyoma, which originates in the smooth muscle of blood vessel walls; and genital leiomyoma, which originates in the smooth muscle of the scrotum, vulva, or nipple.[2-4]

An 18-year-old man presented with a mass from 7 years earlier, located on the third finger of his left hand. The lesion was supple, flesh-colored, and nodular, with an approximate diameter of 1.5 cm (Figure 1A). The skin surface was smooth and the tumor was not attached to deep tissues. Under local anesthesia, the lesion was removed and the tumor-feeding vessels were ligated (Figure 1B). A histopathological study with hematoxylin-eosin showed that the lesion was a regular, well-delimited neoplasm. It was well vascularized with thick vascular walls and bundles of intervascular smooth muscle fibers (Figure 2). The cells in smooth muscle bundles had an elongated nucleus, of rounded, cigar-shaped borders and abundant eosinophilic cytoplasm. All findings were consistent with the diagnosis of angioleiomyoma.

Vascular leiomyomas are solitary benign tumors originating in the smooth muscle layer of the vessel walls.[5] However, some authors believe this entity could be a type of hamartoma, vascular malformation, or a stage within the continuous process of smooth muscle proliferation in the context of transformation of the hemangiomas to leiomyomas.[6-8] On occasions, special stains for smooth muscle cells (Masson trichrome and immunohistochemical techniques for smooth muscle vimentin, desmin, and actin) may be needed to differentiate angioleiomyomas from other tumors. Hachisuga et al[7] have classified angioleiomyomas into 3 histological types: solid, in which the muscle bundles surround numerous small vascular lumens; cavernous, with dilated vascular channels, in which the vascular walls are difficult to distinguish from the intervascular smooth muscle; and venous, with thick vascular walls, readily distinguishable from intervascular smooth muscle.

Angioleiomyomas are more common between the third and fifth decade of life and are twice as common among women as men.[9]

Our patient's lesion is atypical because there were no symptoms and because of its location (proximal phalanx of the third finger on the left hand). This type of lesion appears predominantly on the limbs, particularly the legs, but may also be found on any other part of the body such as the arms, trunk, head, and neck.[10] It rarely presents on the hands, and even more rarely on the fingers.[4,5] In terms of clinical symptoms, angioleiomyomas present as solitary and usually painful subcutaneous nodules. The pain may be secondary to local ischemia caused by vascular contraction or compression of the cutaneous nerves by the tumor.[11] Differential diagnosis should be done with other painful tumors: angiolipomas, glomus tumors, eccrine spiradenomas, neurofibromas, lipomas, and leiomyosarcoma. Digital angioleiomyomas that present with no symptoms are rare,[10] except those that present on the head or neck.

Imaging studies, such as ultrasound and magnetic resonance imaging, are nonspecific[12] and the diagnosis can only be made based on the histology. On occasions, radiological images may distinguish vascular angioleiomyomas from malignant tumors.

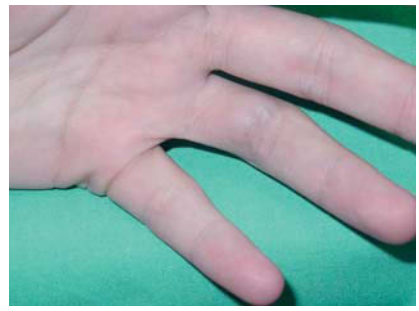

Figure 1A. Subcutaneous mass of 1 cm diameter and elastic consistency on the flexural surface of the third finger of the left hand.

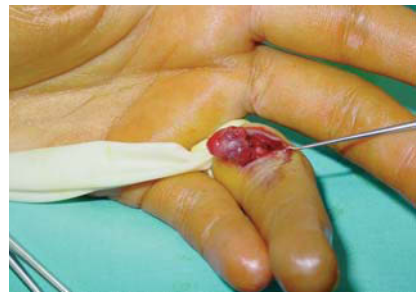

Figure 1B. Excision of the lesion. Note the solid, well-defined lesion.

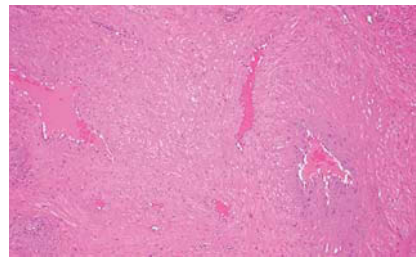

Figure 2. Rich vascular channels with a thick muscle wall and abundant smooth muscle bundles between them.

The treatment of choice for angioleiomyomas is simple excision of the mass, followed by ligation of the tumor-feeding vessels.[5] In some cases, angioleiomyomas may originate in the muscle wall of an artery and, if collateral circulation is insufficient, simple excision

may not be satisfactory and repair of this artery may be necessary.

References

1. Avilés-Izquierdo JA, Lecona-Echeverría M, Lázaro-Ochaita P. Nódulo en el pabellón auricular. Actas Dermosifiliogr. 2005;96:626-7.
2. González Hermosa MR, Aseguinolaza Zabaleta B, Lozano Valero M, González Pérez R, González Güemes M, Soloeta Arechavala R. Leiomioma escrotal pediculado. Actas Dermosifiliogr. 2002;93:522-3.
3. Requena L, Baran R. Digital angioleiomyoma: an uncommon neoplasm. J Am Acad Dermatol. 1993;29:1043-4.
4. Domínguez-Cherit J, Brandariz A. Distal digital angioleiomyoma: a case report and review of the literature. Int J Dermatol. 2003;42:141-3.
5. Calle SC, Eaton RG, Littler JW. Vascular leiomyomas in the hand. J Hand Surg. 1994;19:281-6.
6. Duhig JT, Ayer JP. Vascular leiomyoma: a study of sixty-one cases. Arch Pathol Lab Med. 1959;79:32-41.
7. Magner D, Hill DP. Encapsulated angiomyoma of the skin and subcutaneous tissue. Am J Clin Pathol. 1961;35:137-41.
8. Hachisuga T, Hashimoto H, Enjoji M. Angioleiomyoma: a clinicopathologic reappraisal of 562 cases. Cancer. 1984;54:126-30.
9. Holst VA, Junkins-Hopkins JM, Elenitsas R. Cutaneous smooth muscle neoplasms: clinical features, histologic findings, and treatment options. J Am Acad Dermatol. 2002;46:477-90.
10. Wang CP, Chang YL, Sheen TS. Vascular leiomyoma of the head and neck. Laryngoscope. 2004;114:661-5.
11. Toida M, Koizumi H, Shimokawa K. Painful angiomyoma of the oral cavity: report of a case and review of the literature. J Oral Maxillofac Surg. 2000; 58:450-3.
12. Sardanelli F, Renzetti P, Nardi F, Cittadini G, Tanara G, Simoni G. Imaging of angioleiomyoma. J Clin Ultrasound. 1996;24:268-71.

Cutaneous Chloromas as the Presenting Feature of Acute Myeloid Leukemia in a Child

E Roche-Gamón,[a] I Febrer-Bosch,[a] A Verdeguer,[b] and V Alegre de Miquel[a]

[a]Departamento de Dermatología, Hospital General Universitario de Valencia, Spain
[b]Oncología Pediátrica, Hospital Universitario La Fe, Valencia, Spain

To the Editor:

We describe the case of a 10-month-old boy, born to healthy parents after a dichorionic-diamniotic twin pregnancy. He was referred to our service because, from 1 week earlier, he had developed multiple papules and erythematous nodules that converged, forming asymptomatic infiltrated plaques of several centimeters. The lesions had started on the head (forehead, cheeks, and retroauricular area) (Figure 1), and rapidly spread to the trunk and limbs (Figure 2). According to the mother, some days earlier, he had presented a large plaque on the scalp that had disappeared spontaneously in a few days, without leaving any sequelae. In addition, there were enlarged laterocervical and inguinal lymph nodes, measuring 1 cm, in the surrounding area, but no constitutional symptoms.

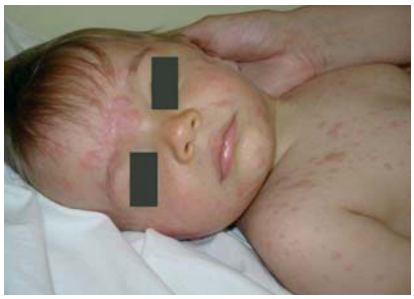

Figure 1. Initial facial lesions.

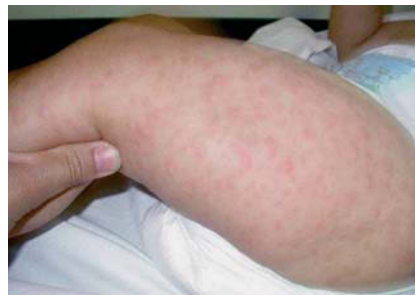

Figure 2. Generalized erythematous nodules and papules.

Five days later, the head and trunk lesions had diminished notably without treatment, although numerous papules had appeared on the limbs. Initially and during follow-up, various laboratory tests, a chest x-ray, and an abdominal ultrasound were done, but all findings were normal or within normal limits. A deep punch biopsy was taken, with histopathological study showing a predominantly vascular superficial and deep dermal infiltrate, arranged linearly and dissecting the collagen bundles (Figure 3). The epidermis was intact; the dermis showed a tumor-free, grenz zone. The infiltrate was formed by cells of undifferentiated appearance, with large hyperchromatic nuclei and numerous atypical mitoses. Immunohistochemically, the cells were positive for myeloperoxidase, lysozyme, CD43, and CD68, but were negative for CD56, tumor cell labeling index, CD123, terminal deoxynucleotidyl