

Solitary Angiokeratoma of the Vulva Mimicking Malignant Melanoma

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PRACTICE POINTS

- Solitary angiokeratoma of the vulva often is misdiagnosed as malignant melanoma due to its rapid growth and dark color.
- Dermoscopy is a valuable tool for diagnosing vulvar angiokeratoma to avoid unnecessary excisions.

To the Editor:

Angiokeratoma is a benign vascular tumor characterized by several dilated vessels in the superficial dermis accompanied by epidermal hyperplasia and hyperkeratosis.¹ Angiokeratoma of the vulva is a rare clinical finding, usually involving multiple lesions as part of the Fordyce type.² Solitary angiokeratoma occurs predominantly on the lower legs,³ and although other locations have been described, the presence of a solitary angiokeratoma on the vulva is rare.⁴ We report 2 cases of solitary angiokeratoma on the vulva that was misdiagnosed as malignant melanoma. Both patients were referred to our center for evaluation and excision.

A 65-year-old woman (patient 1) and a 67-year-old woman (patient 2) presented with a bluish black, growing, asymptomatic lesion on the right (Figure 1) and left labia majora, respectively. Both patients were referred by outside physicians for excision because of suspected malignant melanoma. Physical examinations revealed bluish black globular nodules that measured 0.5 and 0.3 cm in diameter, respectively. Dermoscopy (patient 1) revealed dark lacunae. Histopathologic examination of the vulvar lesion (patient 2) showed dilated, blood-filled, vascular spaces in the papillary dermis, accompanied by overlying

acanthosis, hyperkeratosis, and papillomatosis that was consistent with angiokeratoma (Figure 2).

Angiokeratoma, particularly the solitary type, often is misdiagnosed. Clinical differential diagnoses may include a wide range of pathologic conditions, including condyloma acuminata, basal cell carcinoma, pyogenic granuloma, lymphangioma, nevi, condyloma lata, nodular prurigo, seborrheic keratosis, granuloma inguinale, and deep fungal infection.^{2,5} However, due to its quickly growing nature and its dark complexion, malignant melanoma often is initially diagnosed. Because patients affected by angiokeratoma of the vulva usually are aged 20 to



FIGURE 1. Angiokeratoma presenting as a bluish black granular nodule on the right labia majora (patient 1).

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The authors report no conflict of interest.

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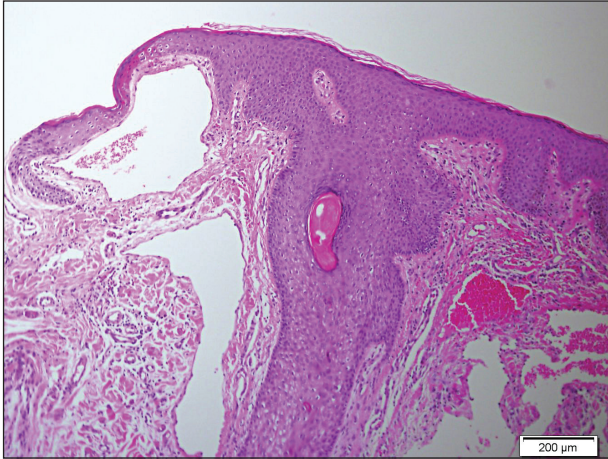


FIGURE 2. Histopathology of the vulvar lesion (patient 2) demonstrated dilated, blood-filled, vascular spaces in the papillary dermis, accompanied by overlying acanthosis, hyperkeratosis, and papillomatosis consistent with angiokeratoma (H&E, original magnification $\times 100$).

40 years,⁵ and vulvar melanoma is typical for middle-aged women (median age, 68 years),⁶ this misdiagnosis is more likely in older patients. It should be noted that a high index of suspicion for melanoma often is present when examining the vulva, considering that this area is difficult to monitor, and there is an especially poor prognosis of vulvar melanoma due to its late detection.^{6,7}

In the past, biopsy was considered mandatory for confirming the diagnosis of vulvar angiokeratoma.^{5,8,9} However, dermoscopy has emerged as a valuable tool for diagnosis of angiokeratoma¹⁰ and also was helpful as a diagnostic aid in one of our patients (patient 1). Therefore, we believe that dermoscopy should be performed prior to a biopsy of angiokeratomas of the vulva.

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