

PRACTICAL DERMOSCOPY

Videodermoscopy in Acquired Arteriovenous Malformations of the Skin

Videodermatoscopia en malformaciones arteriovenosas cutáneas adquiridas

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Case Presentation

A 48-year-old man presented with a 1-year history of asymptomatic erythematous lesion on his left upper eyelid (Fig. 1). Patient #2 is a 57-year-old woman with an erythematous papule on her upper lip (Fig. 2). Both lesions were slightly pulsatile on palpation. No thrill or increased temperature were noted. Videodermoscopy revealed the presence of tortuous red vessels and a pulsatile flow (Videos 1 and 2). The Doppler ultrasound of patient #2 revealed the presence of a small well-demarcated high-flow vascular lesion.



Figure 1 Erythematous lesion on the left upper eyelid with tortuous vessels (patient #1).



Figure 2 Erythematous papule on the upper lip (patient #2).

What Is Your Diagnosis?

Acquired arteriovenous malformation of the skin.

Comment

Given the small size of the lesions, simple surgical excision was performed in the two cases, confirming the diagnosis of arteriovenous malformation via histopathological examination. At the follow-up visits, the patients did not complain of any symptoms, and surgical scars did not present signs of persistence or recurrence either.

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Arteriovenous malformations (AVMs) are abnormal communications between arteries and veins without interposed capillary beds. The most common location for AVMs is the head, including eyelids and lips. Differential diagnosis should be established with other vascular malformations, vascular tumors, and benign tumors such as intradermal melanocytic nevi, and non-melanoma skin cancer, particularly basal cell carcinoma.

Some studies have proposed an algorithm to assess vascular malformations and vascular tumors based on their dermoscopic features.¹ Videodermoscopy has also been suggested as a tool to categorize high-flow vascular malformations.² Although dermoscopic features of AVMs include blue-red lacunae, milky-red area and winding red vessels, pulsatility is often evidenced clinically or seen on the videodermoscopy.^{2–4}

Although other imaging modalities such as the Doppler ultrasound usually help in this process, definitive diagnosis is established via histopathological examination only. However, dermoscopy is readily available for dermatologists. For this reason, videodermoscopy is a useful tool for differentiating vascular lesions and skin tumors, which may facilitate the diagnosis of high-flow vascular malformations.

Informed Consent

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Funding

None declared.

Conflict of Interest

None declared.

Appendix A. Supplementary Data

Supplementary data associated with this article can be found in the online version available at <https://doi.org/10.1016/j.ad.2024.03.039>.

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