



Hemorrhagic Papule on a Women's Forearm

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Abstract

Aesthetic physicians and their staff may be the first point of contact for patients who have skin cancers. Encouraging aesthetic centers staff to inquire about any lesions that are painful, changing or bleeding will help save lives. We present a case of a woman presenting for a neurotoxin procedure and during her intake was found to have an amelanotic melanoma by a medical assistant.

Case Presentation

A 51 year old woman presents for an aesthetic procedure. As an aside, she mentions she has a bleeding spot on her left arm for the past 2 months. She reports that the lesion can be pinched off but it bleeds profusely. On examination, there is a 3 mm hemorrhagic papule (Figure 1). She has had no prior skin cancers and no family history for skin cancers.

Diagnosis: Amelanotic Melanoma

Amelanotic Melanomas (AM) are tumors comprised of non- or low-functioning melanocytes. AM are rare and represent only 2% to 8% of all melanomas, these tumors are more commonly seen in females, older individuals, blonde or red haired individuals, or those with a lack of concomitant nevi [1-5]. Since AMs are derived from dysfunctional melanocytes, the lesions are usually pink and oftentimes lack the clinical criteria used to detect Pigmented Melanomas (PM) such as ABCDE (asymmetry, border, color, diameter, evolution) [4]. Furthermore, AMs have many clinical and histological look-alikes which may distract from the actual diagnosis. As such, AMs are often misdiagnosed or undiagnosed at physician visits and not properly managed until the disease has progressed to more serious stages, leading to increased burden and mortality of the disease [2-4].

Clinically, AMs display varied morphologies, however they usually present as a slow growing, friable pink lesion, often with ulceration [3-6]. AMs are commonly found on patients' head, neck and extremities, but have been reported to be found in the rectum and on feet [1-3]. This variation in location further expands providers' differential diagnoses, especially in older or diabetic individuals in whom physicians are likely to suspect more common problems, such as other malignancies or diabetic ulcers [7,8]. Due to these nonspecific findings, along with the lack of pigmentation found in the lesions, AMs are often frequently misdiagnosed as pyogenic granulomas, basal or squamous cell carcinomas, adenocarcinomas, actinic keratosis, hemangioma, verruca vulgaris, and diabetic foot ulcers (Table 1) [1,5,7-9].

Histologically, AMs may present as epithelioid, spindled, desmoplastic, or rhabdoid lesions, and spreading, nodular, lentigo maligna, and acral lentiginous subtypes have all been reported [1,2,4]. They bear a high incidence of mitotic figures, nuclear pleomorphism, and increased Breslow's thickness [1-3,10]. Additionally, AM can display marked cellular diversity, with different AM samples containing signet ring cells, Paneth cells, small cells, and giant cells [1]. These varied histologic presentations, compounded with the absence of melanin, pose further diagnostic challenge. As such, AM can be confused histologically with neuroectodermal tumors, small cell carcinoma, adenocarcinomas, and sarcomas, among others [1,8,11].

Due to the delay in diagnosis and worse outcomes in AM compared to PM, quick detection and diagnosis is imperative for patients' ultimate prognosis [3,5]. Additionally, it is important to remember that patients who have had one AM have an increased incidence of having another AM [12]. Fortunately, there are useful diagnostic tools for diagnosing AM. AM has fairly specific dermoscopy findings, including dotted, irregular (polymorphous) blood vessels, and milky-red lesions [10,13,14]. Immunofluorescence staining can also help to diagnose AM from histologic preparations, especially when directed towards Human Melanoma Black-45 (HMB-45), Soluble 100% (S-100), Melanoma-associated protein A (Melan A) and Tyrosinase [1,8,11]. Furthermore,

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Table 1: Common misdiagnoses of Amelanotic Melanoma based on clinical and histologic appearances.

Clinical Look-alikes	Histologic Look-alikes
Pyogenic Granuloma	Neuroectodermal Tumors
Basal Cell Carcinoma	Small Cell Carcinoma
Squamous Cell Carcinoma	Adenocarcinoma
Adenocarcinoma	Rhabdomyosarcoma
Actinic Keratosis	Verruca Vulgaris
Verruca Vulgaris	
Diabetic Foot Ulcers	
Merkel Cell Carcinoma	
Keratoacanthoma	

**Figure 1:** Hemorrhagic papule on left forearm.

certain preparations, including Fontana-Masson stain and a genetic test for BRAF mutations may assist in establishing a definitive diagnosis [1,13].

To date, cancer survival varies with gender [15]. We try to educate patients and our staff about skin cancer. Our patient was reluctant to show us the lesion until a medical assistant asked her if there were any lesions on her body that were painful, changing or bleeding. Women are often the medical gatekeepers for their family members—we try to treat the entire family unit and have found it helpful to have significant others in the room at the same time so we can show them which lesions we are most interested in so they can help us find skin cancers when they are a small diameter. Full body photography, dermoscopy, the Wood's lamp (black light), and significant others are all useful for detecting AM. Our patient had a wide local excision and is doing fine. Her husband came in as a result of her experience and had a non-melanoma skin cancer. Women seeking aesthetic procedures should be reminded that if they have any lesion that hurts, bleeds or is changing it needs an evaluation.

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