

Reliability of patient's anamnesis in the diagnosis of acral melanoma

To the Editor,

Acral melanoma (AM) is a rare subtype of cutaneous malignant melanoma that presents on soles, palms, and nails, areas often omitted during routine medical check by both patients and physicians (Albreski & Sloan, 2009; Desai, Ugorji, & Khachemoune, 2018; Gumaste et al., 2015; Mansur, Demirci, Ozel, Ozker, & Yildiz, 2016; Oliveira et al., 2014; Rheingantz da Cunha Filho, Matte, & Hohmann Camina, 2016; Tanioka, 2011). Furthermore, AM is associated with the highest misdiagnosis rate (25–36%) of other types of melanoma and diagnostic delay inevitably leads to a worse prognosis (Albreski & Sloan, 2009; Mansur et al., 2016).

There are no data in the literature that underline the role of accuracy and reliability of patient's medical history as cofactor of this frightening event.

Herein, we propose two cases of patients with acral lesions referred as traumatic.

A 61-year-old woman came to our attention for the appearance of a pigmented and ulcerated formation of about 20 mm on her right sole. She had no family history of melanoma and no co-morbidities. She referred that the lesion appeared about 2 years before, after colliding with a stone (Figure 1a). The dermatoscopic examination showed a central ulceration with blue-black background not following

the rete-ridges pattern (Figure 1a, left frame). The patient undergone to incisional biopsy and resulted an ulcerated AM, 2.4 mm Breslow thickness (stage pT3b), no capturing lymph node on scintigraphy examination (Figure 2a).

The day after, a 79-year-old man came to our Skin Cancer Unit with a growing pigmented nodular lesion on his first finger of the right hand. As patient of Case 1, he did not reveal family history of melanoma and no co-morbidities. He reported the appearance since childhood, following accidental penetration of a pencil tip (Figure 1b). Dermatoscopy revealed rainbow pattern in a homogeneous bluish background (Figure 1b, left frame). Histological examination showed a gigantocellular granulomatous foreign body reaction with blackish particles and polarisable material (Figure 2b).

Soles, palms, and nails are sites often subject both acute and chronic trauma leading patients pay less attention to injuries in these areas even less accessible, especially soles. In addition, some professionals often overlook the objective examination of the extremities.

AM clinical presentation is very variable, from a flat blackish blue lesion to an amelanotic papule of pinkish color (Desai et al., 2018; Tanioka, 2011), for this reason misdiagnosis is very common ranged from 25 to 36% (Mansur et al., 2016). It is well documented that the



FIGURE 1 (a) Pigmented and ulcerated lesion on the right sole; left frame—dermatoscopic examination showing blue-black background not following the rete-ridges pattern. (b) Pigmented nodular lesion on the first finger of the right hand; left frame—dermatoscopic evaluation revealing rainbow pattern in a homogeneous bluish background

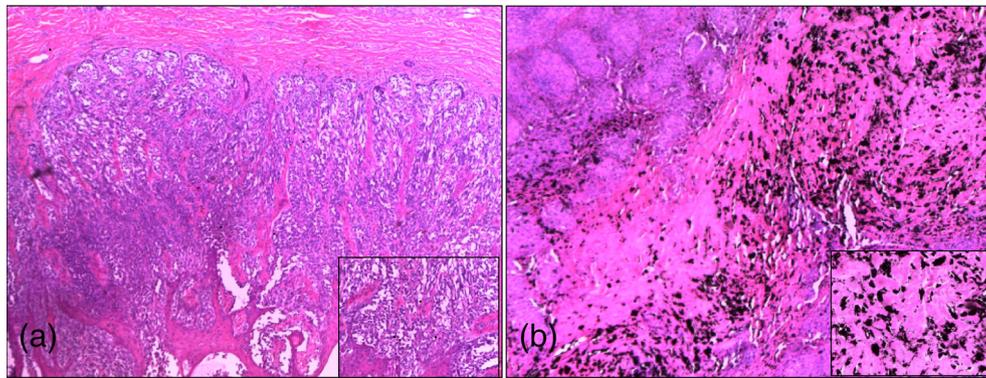


FIGURE 2 (a) Histologic examination of patient case 1a (Acral Melanoma of the sole) showing tumor cell invading periannessial tissue (HE $\times 5$ magnification); left frame—higher magnification of (a); HE $\times 20$ magnification). (b) Histologic examination of patient case 1b showing granulomatous reaction around the central core made of fragments of foreign material and fibrosis (HE $\times 5$ magnification); left frame—higher magnification of (b) revealing polarizable material (HE $\times 20$ magnification)

diagnostic delay is associated with a greater thickness of the tumor at diagnosis and a worse prognosis (Deng, Yu, Cui, & Zheng, 2019; Sondermann et al., 2016).

Main differential diagnoses include both melanocytic and non-melanocytic lesions: (a) blue nevus, (b) hemangioma, (c) palm-plantar warts, (d) fungal infections, (e) hematoma, (f) diabetic foot ulcer, (g) pyogenic granuloma; while in the worst cases (h) cutaneous melanoma metastasis or (i) angiosarcoma (Gao, Chen, & Ran, 2017; Oliveira et al., 2014).

It is unknown how much the diagnostic delay is influenced by the patient's medical history which, being based on memory, lacks a documented truthfulness. Many patients with subsequent diagnosis of AM report a history of trauma during the first visit and we do not know how this affects the degree of suspicion of the clinician in front of a lesion with multiple clinical and dermatoscopic aspects.

Both our patients reported a history of trauma, but the whole of clinical and dermatoscopic features prompted us to do an incisional biopsy leading to diagnosis of AM in the first case and foreign body in the second. With this report, we emphasize that we do not have tools to know the reliability and accuracy of the patient's medical history, so how do we proceed? In doubtful cases, the diagnostic procedure through clinical and dermatoscopic investigation is necessary, obviously there are conditions that cannot be solved with noninvasive methods and in these cases the histopathological examination is decisive.

CONFLICT OF INTEREST

The authors have nothing to disclose.

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