Melanoma Developing from an Intradermal Nevus: Report on Two Patients

Dear Editor,

Approximately 25-33% of cutaneous melanomas arise from nevi (1). Shitara *et al.* suggested that junctional and compound nevi are more likely give rise to melanoma than intradermal nevi, but this has not been definitively confirmed (2).

Based on these results and our own clinical observation on rare malignant transformation in intradermal nevi, we present two patients with melanoma developing from an intradermal nevus.

The first patient, a 63-year-old woman, presented with a suspicious lesion in 2017 on the upper back in the form of a dark brown macula juxtapositioned next to the dermal nevus (Figure 1, a). Dermoscopy of a flat part showed a dark-brown reticular, slightly structureless pattern (Figure 1, b). The patient was therefore referred to surgical excision. Histopathology of the elevated part showed aggregates of intradermal nevus cells of normal morphological characteristics. Atypical and irregularly sized melanocytes were observed in the flat part, infiltrating the entire depth of the epidermis and the upper parts of the papillary dermis. The diagnosis of malignant melanoma developing from a dermal nevus was established (Breslow 0.4 mm, pT1A) (Figure 1, c).

The second patient, a 71-year-old man, presented in 2018 with a pendular non pigmented intradermal nevus on middle part of the back. The left-hand lateral side of the intradermal nevus showed a brown to dark-brown spot which measured 12 mm (Figure 2, a). A central blue white veil, atypical pigment network, and dots and globules of various sizes and shapes were observed on dermoscopy (Figure 2, b). The base of the nevus showed an asymmetric pigmentation. Because the lesion was highly suspicious of melanoma, an urgent excision was indicated. The histopathology of the elevated part (dermal nevus) showed a regular maturation of the nest of nevus cells in the dermis. The histopathology of the dark-brown macule showed proliferation of atypical melanocytes with well-marked nucleoli throughout the epidermis

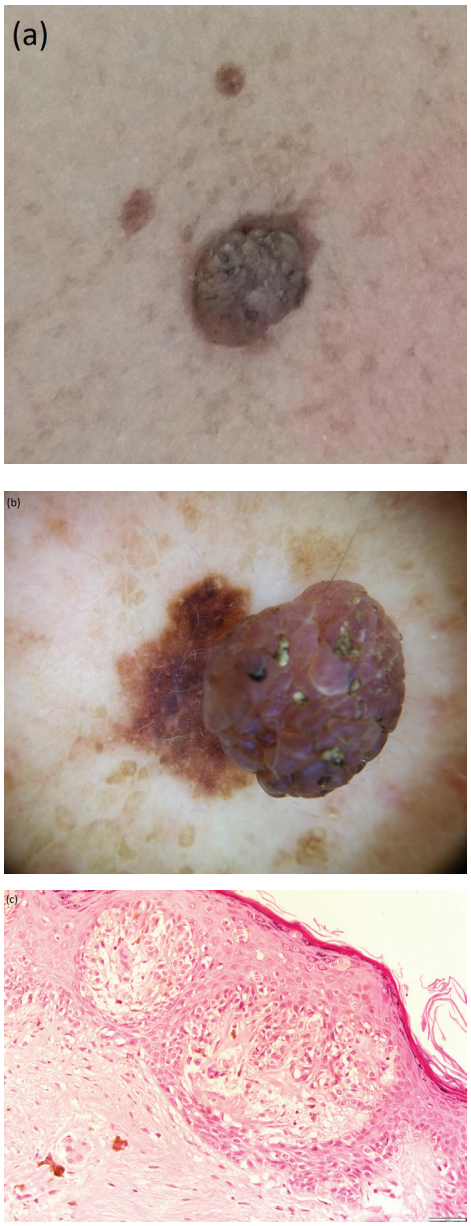

Figure 1. First patient. (a) Clinical presentation. (b) Dermoscopy. (c) Histopathology, hematoxylin and eosin staining ×20.

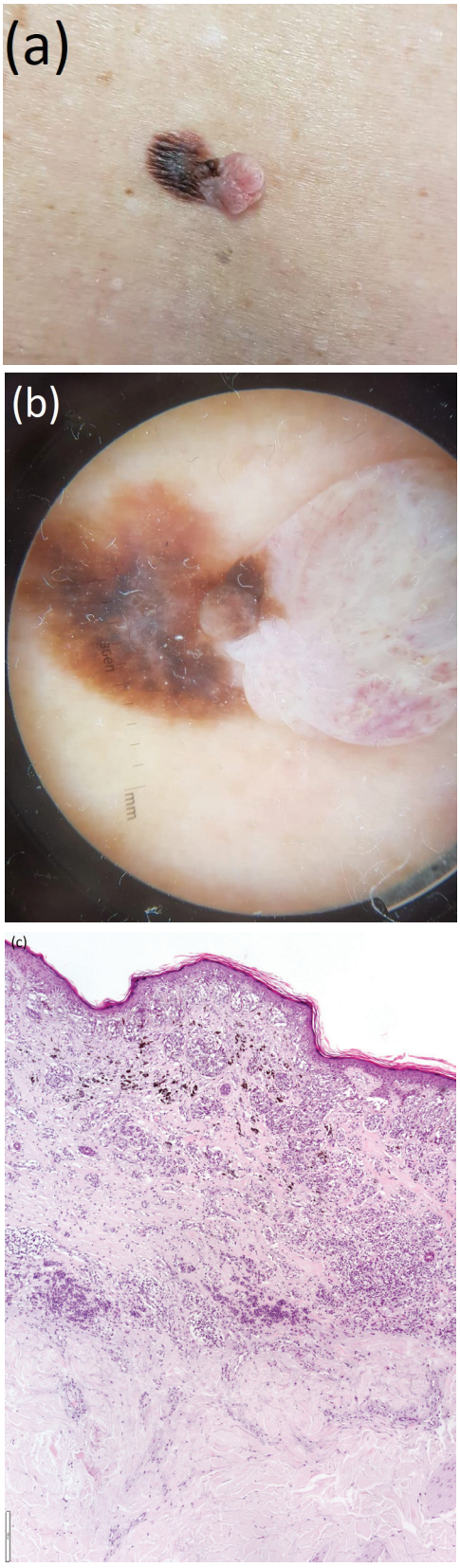

Figure 2. Second patient. (a) Clinical presentation. (b) Dermoscopy. (a) Histopathology, hematoxylin and eosin staining ×20.

with the infiltration of the suprabasal epidermal layers and papillary dermis. The lesion was classified as melanoma with a partial regression (Breslow 1.3 mm, pT2A), arising in association with an acquired intradermal nevus (Figure 2, c).

Case reports with melanoma developed from a small congenital or acquired dermal nevus are extremely rare in the literature.

In all published cases, histopathology revealed a melanoma component situated below or laterally, next to the merging dermal nevus (3) and in one case next to and above the dermal component (4), which is very similar to our cases.

In both of our cases, melanoma presented an epidermal component with atypical, large melanocytes next to or above the typical and small intradermal melanocytes of the Unna nevus.

Despite the fact that the reported statistical occurrence of malignant transformation of every individual nevus is very low in the elderly population (>60 years of age), 1 in 33,000 (5), we believe our two presented cases show a striking similarity in the melanoma manifesting in the vicinity of a previously existing lesion, indicating nevus-associated melanoma (NAM).

This letter presents an interesting finding of two cases, with a form of melanoma (NAM) that is statistically very rare in older patients but occurred twice within the span of a year within the same town and was diagnosed in the same hospital.

Intradermal nevi are most commonly considered to be benign skin lesions. However, previous research and our two cases shows that intradermal nevi are not immune to malignant alteration. Based on these results, we suggest a detailed clinical and dermoscopic evaluation of each skin lesion, including intradermal nevi.

Flat melanocytic parts in the vicinity of intradermal nevi should always raise suspicion and warrant excision with histopathological evaluation of the lesion so as to allow timely response to any malignant alteration.

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