Superficial Spreading Melanoma Resembling Spitz Nevus on the Plantar Surface

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Key Words

Plantar melanoma
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The acral regions of the limbs are the commonest site for melanoma in the Japanese [1, 2]. This high proportion of acral melanoma may be the result of the relatively low occurrence of melanoma in other parts of the body, because the absolute incidence of melanoma on these regions among the general population is found to be similar in different races [3,4]. Acral lentiginous melanoma is a common type of melanoma arising in the acral regions in each race [5-8], and superficial spreading melanoma (SSM) is also prominent in Caucasians. In a study of melanoma in a white Caucasian population 20 out of 51 patients with plantar melanoma had SSM [9]. In contrast, acral lentiginous melanoma shows far higher frequency in Japanese than others [1, 2, 8, 10]. However, the number of other subtypes of melanoma in the acral regions has gradually increased in the Japanese [11]. Recently, we encountered a rare case of SSM which resembled Spitz nevus on the plantar surface.

A 58-year-old male patient visited us with a 1-year-history of a red-brown macule on his left foot. The macule gradually increased in size and became slightly elevated. On physical examination, there was a symmetrical, ovoid nodule 17 × 21 mm in size with a regular border on the lateral aspect of his right foot (fig. 1). These clinical features suggested an epithelial tumor such as Bowen's disease and hidradenoma simplex rather than malignant melanoma. However, the possibility of malignant melanoma was also kept in the differential diagnosis, because of the dark brown pigmentation occupying about half of the surface of the nodule (fig. 1).

Histological sections obtained from the excisional biopsy revealed sharply demarcated, intraepidermal tumor nests of various sizes within the irregularly acanthotic epidermis and invasion of tumor cells into the dermis at the central portion. The entire lesion was histologically asymmetric in distribution of tumor cells. In addition, there was an upward pagetoid spread of melanocytes mainly as nests within the entire epidermis that was more prominent in the central portion (fig. 2) than on the periphery. Irregularly shaped, large tumor cells had basophilic nuclei and contained fine melanin granules. Scattered mitotic figures were observed. Kamino

bodies and giant cells were also seen within the nests. The tumor cells noted in the dermis of the central portion were relatively uniform in size, and showed clear cytoplasm and hyperchromatic nuclei, containing scarcely melanin granules. Mature nevus cells were nested in the upper dermis in the peripheral portion. Immunoperoxidase staining with monoclonal HMB-45 antibody was strongly positive for the tumor cells within the entire epidermis, and moderately reactive for the tumor cells in the dermis in the central portion. Intradermal nevus cells on the periphery were not stained with this antibody. Based on these features we finally reached the diagnosis of SSM with tumor thickness 3.0 mm and Clark level IV.

There are reports of malignant melanoma masquerading as Spitz nevus [12, 13]. The sharply demarcated nest formation within the epidermis in the present case resembled those of junctional Spitz nevus, although it is extremely rare on the plantar surface [14]. Therefore, we had initially made a diagnosis of malignant melanoma arising on the lesion of Spitz nevus. The presence of remarkable upward pagetoid

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Fig. 1. Clinical features. The dark-brown pigmentation occupying the left side of the lesion is an important feature in making a diagnosis of melanoma.

Fig. 2. Histological features in the central portion of the lesion revealed prominent nest formation accompanied by the upward pagetoid spread of the tumor nests. HE. × 200.

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spread is considered to be a clue to SSM [15]. However, this feature is not uncommon in benign melanocytic nevi, particularly those on the acral regions [16]. Furthermore, recently Busam and Barnhill [17] reported a case of Spitz nevus characterized by a predominantly pagetoid spread. Therefore, the evaluation of other parameters of malignancy are required for the determination of a diagnosis of melanoma. Besides the presence of pagetoid spread seen within the entire epidermis, the asymmetry of the lesion, pleomorphism, nuclear hyper-chromasia and mitotic activity of the tumor cells in our case seem to be compatible with those of SSM in situ itself. Therefore, we made the final diagnosis of SSM in association with melanocytic nevus. We think that corresponding with the increased incidence of SSM as well as nodular melanomas arising in the acral regions in the Japanese [10, 11], such unusual plantar melanomas may become more frequent in the future.

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Subungual Exostosis of a Finger Resembling Pterygium inversum unguis

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Key Words

Nail · Bone tumors ■ X-ray

Subungual exostoses are the most common benign bony proliferations associated with nail abnormalities. We report a case of subungual exostosis of the finger with atypical clinical appearance resembling a pterygium inversum unguis.

Fig. 1. The lateral portion of the hyponychium is anchored to the under surface of the nail plate.

Fig. 2. An x-ray showing the presence of an exostosis on the dorsal tip of the terminal phalanx.