BRIEF REPORT

A Case of Desmoplastic Melanoma in a Patient with Parkinson's Disease

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Dear Editor:

Desmoplastic melanoma (DM) is a rare variant of malignant melanoma and constitutes less than 1% of all cutaneous melanomas¹. Like all melanomas, especially melanomas of the skin, DM is easily diagnosed in the majority of cases, but some cases can mimic other tumors and cause misdiagnoses. Furthermore, because of the aggressive local behavior and high local recurrence rate of DM, proper diagnosis is essential^{2,3}. Recently, there has been much speculation on the relationship between Parkinson's disease (PD) and melanoma, and according to recent retrospective, case-controlled studies, patients with PD are at 4-fold greater risk of having a history of melanoma, and conversely, patients with melanoma are at similar risk of developing PD. In a recent prospective study conducted in North America patients with PD were found to be at 7-fold greater risk of developing melanoma⁴.

A 81-year-old female presented with an erosive, crusted nodule on a violaceous indurated plaque on her nose (Fig. 1A). We received the patient's consent form about publishing all photographic materials. She had been diagnosed with PD 5 years previously and had been treated with levodopa. The clinical differential diagnoses included basal cell carcinoma, squamous cell carcinoma, Merkel

cell carcinoma, cutaneous lymphoma, and dermal scar tissue. Histopathologic examination revealed hyperchromatic spindle-shaped cells in dermis mixed with dense collagen bundles (Fig. 1B, C). Neurotropic features and a tendency for malignant, spindle-shaped cells to invade nerves in the dermis were also presented (Fig. 1D). Immunohistochemical staining for S-100 protein, CD 68, cyclin D1, Trichrome, produced positive results for infiltrating spindle-shaped cells but HMB45 was negative (Fig. 2). Based on these findings, a final diagnosis of DM was made (cT4aN0M0, stage IIB). The patient was transferred to another hospital for surgical excision and local skin flap. DM frequently poses diagnostic challenges for dermatologists. Biopsy is necessary for precise diagnosis and proper treatment, because DM is a distinct form of cutaneous melanoma with unique histopathologic and immunohistochemical staining features. Physicians should consider counseling melanoma patients about the risk of PD and undertaking cutaneous melanoma surveillance in PD patients. A family history of melanoma and lighter hair and skin color confer higher risks of developing PD, and having a first-degree relative with either disease conveys an increased risk of developing the other. Possible connections between the two diseases explored, include pigmentation genes in neural-derived cells, pesticides, melanocortin 1 receptor polymorphisms, and abnormal cellular autophagy⁵.

A retrospective review was performed in patient with malignant melanoma to find the association with PD from 2007 to 2017 in our center. Interestingly, 3 out of 43 patients (7%) with malignant melanoma had PD. Among melanoma patients over 65 years old, comorbid PD patients were 18 patients (16.7%). Future research on this topic will undoubtedly provide further insight into the cause of this relationship as well as necessary screening or patient counseling measures that should be implemented.

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Fig. 1. (A) An erythematous crusted papule with violaceous sclerotic surrounding plaque on the nose. (B) High magnification showing characteristic bundles of malignant, (C) spindle-shaped cells in dermis admixed with collagen bundles. (D) Desmoplastic melanoma with neurotropic features showing malignant spindle-shaped cells tended to invade around nerves (H&E, original magnification: B, $\times 200$; C, $\times 400$; D, $\times 400$).

Fig. 2. (A) Histopathologic examination shows positive results for S-100 protein, (B) CD 68, (C) cyclin D, (D) Trichrome, for infiltrating spindle-shaped cells (A~D: original magnification $\times 200$).

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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A Case of Cutaneous *Mycobacterium chelonae* Infection Induced by Body Scurbbing

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Dear Editor:

A 69-year-old female presented with a 7-month history of multiple variable sized bizarrely shaped ulcers and erosions on the ecchymotic or reddish patches on the neck, chest, and arms (Fig. 1A, B). She had no underlying disease and wasn't taking any medicine which could suppress her own immunity. The lesion originated on the neck, and slowly spread to the chest over a duration of 2 months. After that, it subsequently spread from the chest to the arms over a duration of 3 months. The lesion caused itching and pain. She was treated with antibiotics and topical steroid in local clinics, but her condition had not improved. There was no history of invasive procedure or trauma. The patient's daughter disclosed that she had scrubbed the patient's body daily with an abrasive scrub towel while bathing her. Skin biopsy was performed on

her neck and right forearm. Histopathologic findings showed granulomatous inflammation on the dermis and subcutaneous tissue on the both specimens (Fig. 2A, B). Numerous acid-fast bacilli were detected by acid-fast bacilli stain (Fig. 2C) and a polymerase chain reaction revealed *Mycobacterium chelonae*. The patient was treated with clarithromycin for 6 months, and the lesion has since almost healed.

Atypical mycobacterial infection is caused by mycobacteria, other than *Mycobacterium tuberculosis* and *Mycobacterium leprae*¹. Atypical mycobacteria are present in many environmental areas, such as wet soil, water, and in dairy products. Tap water is considered the major reservoir, for nontuberculous mycobacteria pathogens in humans².

M. chelonae is a rapid growing mycobacteria, isolated

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