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CONFLICTS OF INTEREST

The authors have nothing to disclose.

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Isolated Phthiriasis Palpebrarum in an Elderly Woman: Diagnosis and Treatment Using by Dermoscopy

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Dear Editor:

A 70-year-old healthy female presented with a 2-week history of erythema and pruritus of both eyelids. She had been diagnosed with blepharitis and treated with topical hydrocortisone and 0.1% sodium hyaluronate ophthalmic solution by an ophthalmologist, but there was no improvement. Examination of the eyelids showed erythematous patches and numerous black granules, which seemed to be particles of mascara (Fig. 1A). Dermoscopy revealed crab lice (circles) and ovoid nits on the eyelashes and red-brown feces on the eyelids, not discernible by the naked eye (Fig. 1B, C). There was no other lesion of body area including scalp, axilla, and pubis through meticulous examination. She denied a history of sexually transmitted

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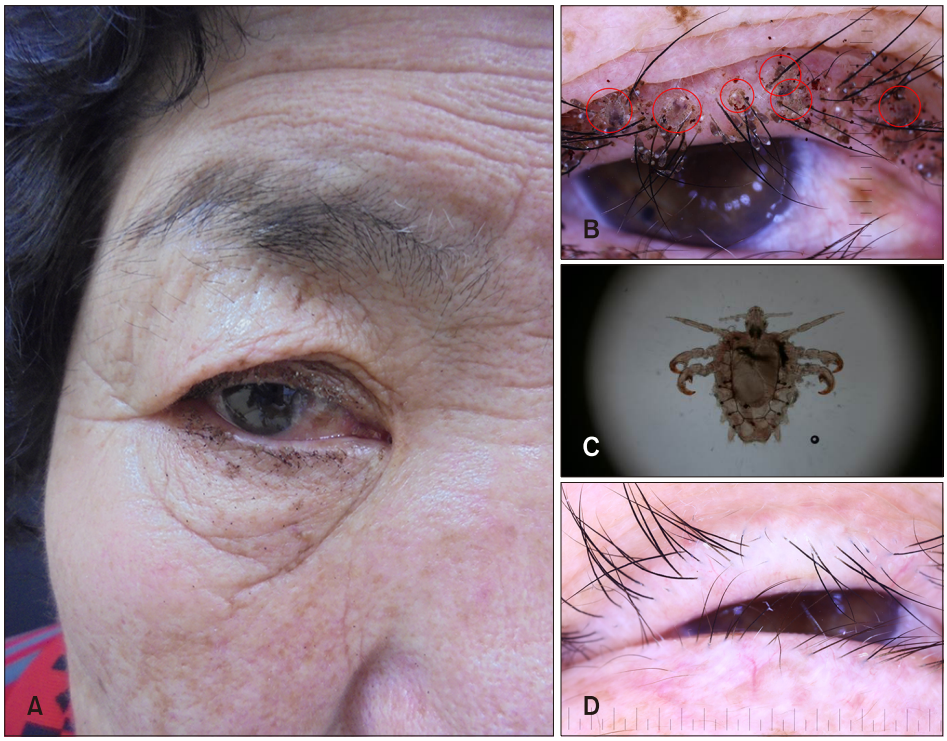

Fig. 1. (A) Naked eye examination showed erythema and multiple black granules around the right eyelid. (B) Dermoscopy revealed several crab lice (circles), ovoid nits, and red-brown feces on the right eyelash and eyelid (×30). (C) *Pthirus pubis* was removed from the eyelash (×100). (D) Dermoscopy of the eyelid revealed complete clearance without lice or nits after 4 weeks of follow-up (×30).

disease and tests were negative. The family history was also non-contributory. A diagnosis of isolated phthiriasis palpebrarum was made; she was successfully treated with mechanical removal of the lice and nits with fine forceps under high-magnification videodermoscopy and topical application of 5% permethrin cream. There was no recurrence after 4 weeks of follow-up (Fig. 1D). We received the patient's consent form about publishing all photographic materials.

Public louse infestation caused by a blood-sucking parasite, *Pthirus pubis*, is a worldwide public health problem that affects about 2% of the human population[1]. It is primarily spread by sexual contact, but is occasionally transmitted by close non-sexual contact with fomites, clothing, or bedding[1,2]. Although *P. pubis* typically infests pubic hair, it is also found on terminal hair elsewhere on the body including the axilla, chest, limbs, eyebrows, and eyelashes[1,2]. Although eyelashes are a common site of *P. pubis* infestation in children because of the lack of terminal hairs in other body areas, isolated phthiriasis palpebrarum, *P. pubis* infestation of eyelashes and eyelids without pubic hair involvement, is very rare in adults[2,3]. It can present with nonspecific pruritus of the eyelid margin with conjunctival hyperemia and is often misdiagnosed as other common dermatological or ophthalmological conditions, including allergic contact dermatitis, seborrheic dermatitis, atopic dermatitis, and blepharoconjunctivitis[3]. Diagnosis can be made by detection of lice or nits with close observation; however, it is sometimes difficult to identify or differentiate the causative parasite from scale or cosmetic products using only naked eye examination because of its small size, semitransparency, and deep burrowing in the eyelid. Simple, noninvasive dermoscopy can be used as an easy and safe diagnostic tool in louse infestations without physical risk, and can rapidly confirm the diagnosis in uncertain cases[4,5]. Various therapeutic modalities have been used, including mechanical removal, trimming/plucking of eyelashes, 1% gamma-hexachlorocyclohexane lotion, petroleum jelly, yellow mercuric oxide cream, 5% permethrin cream, and oral ivermectin[1,2]. Among these, mechanical removal of lice and nits is still regarded as standard treatment[2]. In present case, dermoscopy enabled rapid identification and meticulous mechanical removal of crab lice and nits without any adverse effect.

In conclusion, isolated phthiriasis palpebrarum in adults is very rare and underrecognized. A higher index of suspicion and close examination is critical to avoid misdiagnosis. In addition, dermoscopy can be useful in facilitating accurate diagnosis, treatment, and monitoring.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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A Case of Nivolumab-Induced Lichen Planus

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Dear Editor:

Nivolumab, a programmed death-1 (PD-1) immune checkpoint inhibitor antibody, has demonstrated improved survival over unresectable or metastatic melanoma and locally advanced or metastatic non-small cell lung cancer (NSCLC)[1]. This received approval in South Korea on April, 2016, for these cancers. Here, we present a case of lichen planus (LP) after nivolumab treatment in a patient with NSCLC.

A 51-year-old male diagnosed with NSCLC was referred to our dermatology department because of violaceous plaques on face and neck. Pleural invasion had been found although he had undergone chemotherapy (pemetrexed and cisplatin). Accordingly, nivolumab (2 mg/kg/d) had been started and administered every 3 weeks. Three months after the nivolumab treatment, he developed multiple violaceous or dusky brown flat topped plaques on face and neck. The skin lesion did not disappear so that we performed the skin biopsy. The biopsy specimen of his neck demonstrated orthokeratosis, wedge-shaped hypergranulosis, hydropic degeneration of basal layer, and dermal lichenoid lymphocytic infiltration (Fig. 1). We diag-

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