effects[3,4]. The other advantages of using this pinhole technique with ablative lasers are that is easier to use and less expensive than the treatment modality involving pulsed dye laser, as ablative lasers are usually available in most dermatology clinics.

In conclusion, the pinhole method using the erbium : YAG laser could be beneficial for treating CALMs, which have been proven difficult to treat with other methods. Furthermore, the pinhole method using the CO_2 laser can be used an effective treatment alternative for telangiectasia.

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A Case of Primary Cutaneous Scar Infection Caused by *Aspergillus niger*

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Dear Editor:

Here, we report the case of a 78-year-old healthy woman who presented with a 7.5×8-cm erythematous eschar-like crusted indurated plaque and pustules with purulent discharges on a chicken-pecked scar on the right forearm that developed 2 month prior to her visit (Fig. 1). The patient was diagnosed with type 2 diabetes and hypertension 12 years earlier. She was afebrile and otherwise healthy.

Skin biopsy was performed, including staining with hematoxylin and eosin, and Gomori methenamine silver (GMS) for histologic, bacteriologic, and mycologic examination. The histologic sections stained with hematoxylin and eosin exhibited numerous dichotomously branching and septate hyphae in the granulated tissue. Meanwhile, GMS staining showed dark brown/black-colored hyphae walls (Fig. 2). Cultures from the skin biopsy specimens and exudates on Sabouraud's agar at 37°C repeatedly exhibited rapidly

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Fig. 1. Erythematous eschar-like crusted indurated plaque and pustules with purulent discharges on the right forearm.

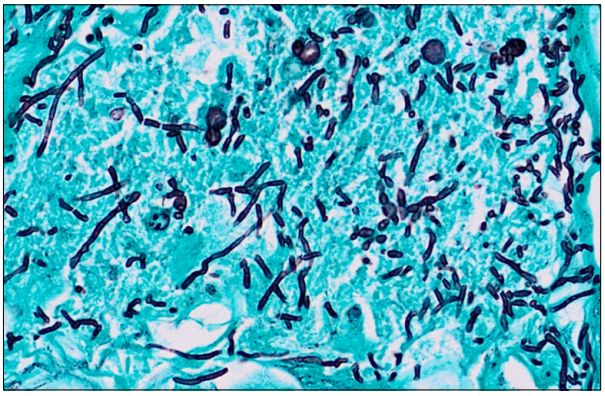

Fig. 2. Septate hyphae with dichotomous branching in the dermis (Gomori methenamine silver, ×400).

growing colonies consistent with *Aspergillus niger*. On the basis of these findings, the patient was diagnosed with primary cutaneous aspergillosis due to *A. niger*. The patient was treated with oral terbinafine hydrochloride 250 mg/day for 3 months, which resulted in complete healing of the lesion 12 weeks after treatment initiation.

Cutaneous aspergillosis can occur as either a primary or secondary infection[1,2]. The initial infection is clinically characterized by macules, papules, nodules, plaques, or hemorrhagic bullae, which may progress into necrotic ulcers covered by a heavy black eschar[3].

The diagnosis of most cutaneous aspergillosis infections generally requires the biopsy of a skin lesion for both culture and histopathology. Fungal isolates from culture media are identified on the basis of colony morphology, color, and sporulation. Meanwhile, histopathologic examination with routine stains variably demonstrates *Aspergillus* hyphae. GMS stain clearly shows hyphae, because the hyphal cell walls stained black, whereas the tissue background stained green (Fig. 2). *Aspergillus* hyphae should have acute-angle branching and frequent septations. The fruiting bodies of *Aspergillus* are rarely observed in tissue samples unless there is an overwhelming burden of organisms at the site. Therefore, although a tentative diagnosis of aspergillosis can be made on the basis of histopathologic GMS staining, a definitive diagnosis requires the identification of *Aspergillus* grown in culture.

The recommended treatment for primary cutaneous aspergillosis includes voriconazole, itraconazole, and amphotericin B. However, recent studies suggest a significant portion of *Aspergillus* species may be resistant to conventional treatment[4]. In the present case, oral administration of terbinafine 250 mg/day was effective.

Primary cutaneous aspergillosis caused by *A. niger* in a healthy patient is extremely rare. To our knowledge, only few cases have been reported worldwide, including only 1 case in Korea[5]. In summary, we present a unique and interesting case of primary cutaneous aspergillosis caused by *A. niger*.

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