TREATMENT-RESISTANT **SCOPULARIOPSIS BREVICAULIS** INFECTION AFTER FILLER INJECTION

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A 42-year-old woman presented in June 2008 with an ulcer covered by a black crust and surrounding palpable tender nodules on the right temple (Fig. 1). In September 2006, she had received collagen injections into both temples, administered by an unlicensed practitioner. About 6 months later, she detected palpable nodules on both temples. She visited the unlicensed practitioner again, and received intralesional injections of an unknown material (described as a neutralizing agent) into both temples. Thereafter, her face became gradually more swollen, and palpable nodules on both temples. She visited the unlicensed practitioner again, and received collagen injections into both temples, administered by an unlicensed practitioner. About 6 months later, she detected palpable nodules on both temples.

Fig. 1. A black-crusted ulcer with surrounding palpable tender nodules on the right temple.
in the nails) (1). In immunocompetent patients, S. brevicaulis infections usually develop after trauma or surgery. However, cutaneous S. brevicaulis infections without previous injury have been reported (4–7). In immunocompromised patients, several cases of invasive systemic infections have been reported (8–10).

Treatment of S. brevicaulis infections is difficult. Several drug susceptibility studies have shown that the organism is resistant to broad-spectrum antifungal agents including amphotericin B, fluconazole, itraconazole, voriconazole, and terbinafine (7, 11, 12). However, in many cases, in vitro data differ from in vivo observations (5, 6). Generally, in immunocompetent patients, cutaneous S. brevicaulis infections can be treated successfully using modern antifungal agents. However, the minimal fungicidal concentration (MFC) for S. brevicaulis is higher than the MFC for dermatophytic fungi. In a previous report of cutaneous S. brevicaulis infection, ringworm lesions on the legs of a 14-year-old girl were cleared with terbinafine (250 mg daily) and itraconazole (100 mg daily) (4). An ulcerative granulomatous cheilitis with lymphatic invasion in a 43-year-old man was completely healed on administration of itraconazole (200 mg daily) for 2 months (5). In that case, the itraconazole MIC for S. brevicaulis was greater than 100 μg/ml (5). However, a plantar infection in a 42-year-old woman was resistant to both terbinafine and itraconazole (6). In addition, a granulomatous skin infection in a 14-year-old girl could not be readily cleared with terbinafine and itraconazole (7). In immunocompromised patients, treatment tends to be much more difficult.

Therefore, some authors have recommended a combination of surgical debridement and antifungal agent therapy to clear S. brevicaulis infections (8, 9). In our patient, however, several combination treatments, including itraconazole, terbinafine, amphotericin B, and voriconazole, with concurrent surgical debridement, failed to resolve the problem.

A similar case has been reported in a Korean journal (13). A 54-year-old woman, who had received filler injections, developed cellulitis-like lesions. Liposuction was performed to remove foreign materials and necrotic tissue, and pus cultures revealed S. brevicaulis infection. Although this patient did not ingest any antifungal agents, no recurrence was noted at 6 months. In another interesting case, antifungal- and cryotherapy-resistant subcutaneous hyalohyphomycosis in an immunocompetent patient was almost completely healed within one month after application of topical 5% imiquimod cream (14). Although the causative fungus, Acremonium strictum, was not the same as in our patient, the observation may be relevant.

Our patient received a collagen injection from an unlicensed practitioner. We have treated one other patient with a Mycobacterium chelonae infection developed after collagen injection by the same person (15).

REFERENCES

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