Treatment of lentigo maligna with tazarotene 0.1% gel

Sergio Chimenti, MD,[a] Anna Maria Carrozzo, MD,[a] Luigi Citarella, MD,[a]
Catia De Felice, MD,[a] and Ketty Peris, MD[b]
Rome and L'Aquila, Italy

We report 2 elderly patients with facial lentigo maligna who experienced complete regression, both clinically and histopathologically, after once-daily topical treatment with tazarotene 0.1% gel for 6 to 8 months. After a follow-up period of 18 and 30 months, no recurrence was observed. We believe that tazarotene might be considered as an alternative medical approach in selected patients with lentigo maligna. (J Am Acad Dermatol 2004;50:101-3.)

Lentigo maligna (LM) is considered an in situ melanoma, clinically appearing as a patch with variegate color and irregular margins, located on sun-exposed areas of middle-aged or elderly patients. It is characterized by a slow radial growth phase, followed in some cases and after several months to years, by development of invasive melanoma. The risk for invasive LM increases in lesions larger than 1.5 cm in diameter. The treatments of choice for LM are surgical excision and Mohs micrographic operation, both of which provide a high cure rate and a low recurrence rate.[1] Other therapeutic approaches include cryotherapy; curettage and electrodessication; argon, carbon-dioxide, or Q-switched lasers; and radiotherapy.[1-5] A medical approach such as intralesional interferon alfa, topical azelaic acid, and imiquimod can be effective in older patients with compromised general conditions and in lesions that are difficult to excise because of their extension or location.[6-8]

Tazarotene is an acetylenic retinoid highly selective for the β and γ subtypes of retinoid acid receptors, whereas it does not bind to the retinoid X receptors.[9] Soon after its introduction for topical treatment of mild to moderate psoriasis, tazarotene 0.1% gel has been used to treat a variety of cutaneous diseases including congenital ichthyosis, Darier's disease, and basal cell carcinoma with good clinical response.[10-12]

We report 2 patients with LM successfully treated with tazarotene 0.1% gel.

CASE REPORTS

Case 1

An 80-year-old woman was examined for an asymptomatic, 3.8- × 3-cm patch with variegate color ranging from pink to brown and black, located on the left zygomatic region (Fig 1, *A*). The lesion had been present for 10 years and previously treated with cryosurgery, and electrodessication and curettage. Dermoscopic analysis showed features highly suggestive of LM such as asymmetric pigmented follicular openings, rhomboidal structures, irregular pigmentation, and slate-gray dots/globules. Histopathologic examination of a 5-mm punch biopsy specimen, taken from the most pigmented area of the lesion, revealed atypical melanocytes, isolated and in small nests, located in the basal layer of the epidermis. Elastotic changes were present in the dermis. On the basis of the patient's refusal to undergo surgical excision, we proposed a topical treatment with once-daily tazarotene 0.1% gel. The patient was informed of the investigative nature of the treatment and written informed consent was obtained. Complete regression, clinically corresponding to disappearance of the lesion and dermoscopically defined by the absence of LM-specific features, was achieved after 8 months of treatment (Fig 1, *B*). Only a slight erythema was still evident after treatment. Posttreatment histopathologic examination of an incisional biopsy specimen taken near the previous most pigmented area showed no evidence of LM. Side effects were limited to mild erythema and pruritus. After a follow-up period of 30 months, no recurrence was observed.

From the Departments of Dermatology, University of Rome "Tor Vergata",[a] and University of L'Aquila.[b]
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Reprint requests: Sergio Chimenti, MD, Department of Dermatology, University of Rome "Tor Vergata," Viale Oxford 81, 00133 Rome, Italy. E-mail: chimenti@uniroma2.it.
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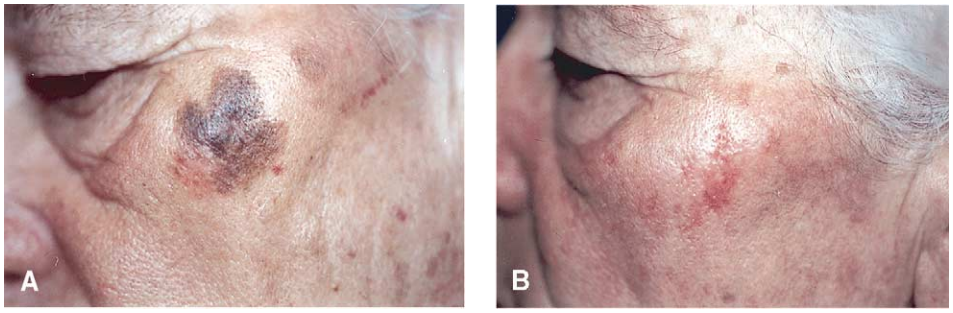

Fig 1. Lentigo maligna of left zygomatic region before (**A**) and after (**B**) 8 months of topical treatment with tazarotene 0.1% gel.

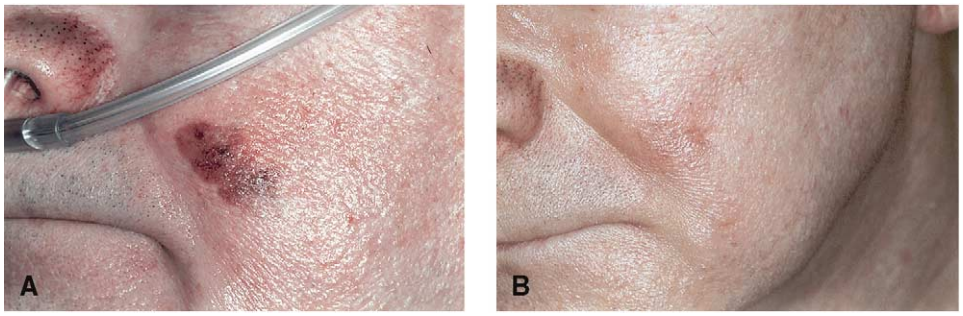

Fig 2. Lentigo maligna of left cheek before (**A**) and after (**B**) 6 months of tazarotene treatment.

Case 2

A 74-year-old man presented with a 10-year history of a light to dark brown, 1.5- × 2.4-cm patch on his left cheek (Fig 2, *A*). The patient's general condition was poor because of chronic obstructive pulmonary insufficiency. Dermoscopic analysis revealed typical features of LM, and histopathologic examination of an incisional biopsy specimen further confirmed the diagnosis. On the basis of the patient's poor conditions, once-daily topical treatment with tazarotene 0.1% gel was suggested. Written informed consent was obtained. Complete regression, as assessed by clinical and histopathologic examinations, was achieved after 6 months of therapy (Fig 2, *B*). Erythema was the only side effect observed during treatment. No evidence of recurrence was detected after a follow-up period of 18 months.

DISCUSSION

A variety of medical approaches have been proposed to treat LM in selected patients. Azelaic acid in the form of 20% cream or 15% to 35% ointment has been successfully used twice a day for 2 weeks to 12 months, depending on the clinical response. Recurrence rate was 22% but all patients cleared when retreated.[7] In other reports, however, lack of clinical response or progression to invasive melanoma have been described during treatment with azelaic acid.[13] Although azelaic acid is relatively well tolerated and could be preferred for patients who are elderly and infirm, it is not recommended as a first-line treatment. 5-Fluorouracil cream and topical tretinoin seem to provide low or no efficacy with a high recurrence rate.[14,15] Topical application of imiquimod, a recently introduced immune response modifier, has been shown to result in complete clinical and histopathologic regression in an 88-year-old woman with LM after 7 months of treatment and in a 50-year-old woman with disseminated cutaneous metastatic melanoma lesions.[8,16]

In our 2 patients, tazarotene 0.1% gel demonstrated a high therapeutic efficacy and tolerability for treatment of LM. Complete regression, as assessed by clinical and histopathologic examinations, was observed after 6 and 8 months of treatment, respectively. After a follow-up period of 18 and 30 months, no clinical recurrence was evidenced. Although the mechanism of action of tazarotene is not yet completely understood, 3 genes named TIG-1, -2, and -3 have been shown to be regulated by tazarotene in psoriasis and in human cancers.[9] It is, therefore, conceivable that these genes might be implicated in the mechanism of action of tazarotene in LM.

In conclusion, treatment of LM with topical tazarotene might be considered an alternative medical

approach in selected patients, in whom surgical modalities are not feasible because of the extent or site of the cutaneous lesion and in elderly patients with poor general conditions. Careful pretreatment histopathologic examination should be performed to establish the noninvasive nature of the cutaneous lesion. Further studies and longer follow-up on the use of tazarotene gel for treatment of LM are warranted.

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