Dear Editor:
Nevus sebaceous is a congenital hamartoma of cutaneous structures including both surface epithelial and adnexal components. The risk of malignancy such as basal cell carcinoma in nevus sebaceous is about 1%. For risk of malignancy and cosmetic reasons, nevus sebaceous is usually removed by surgical excision. Here, we report an interesting case of nevus sebaceous on the face which showed good response to carbon dioxide (CO2) laser treatment combined with isotretinoin.
A 22-year-old Asian female patient visited our dermatology clinic with skin lesion on the right cheek which had appeared since birth. Lesion gradually has grown after puberty. Physical exam revealed multiple grouped, rice sized yellowish papules on the right cheek (Fig. 1A). We performed skin biopsy on the cheek. Histopathologic findings revealed minimal papillomatosis and acanthosis of epidermis with abundant of sebaceous gland proliferation in dermis (Fig. 2). Considering clinical findings with histopathologic findings, we diagnosed her as nevus sebaceous.
She was treated with CO2 laser for nevus ablation instead of surgical excision, because of location and size of the lesion with possibility of scar on face. After CO2 laser treatment, she took isotretinoin for 6 months to prevent recurrence of nevus sebaceous. After 6 months later, lesion was well maintained without recurrence, except little erythematous macules. We received the patient’s consent form about publishing all photographic materials.

Fig. 1. (A) Multiple grouped, rice sized yellowish papules on the right cheek. (B) Six months after carbon dioxide (CO2) laser treatment. (C) Ten months after CO2 laser treatment, lesion was well maintained without recurrence except little erythematous macules.

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ythematous macules (Fig. 1B). Additional CO2 laser treatment performed with discontinuation of isotretinoin. She kept in good state for 12 months.

For nevus sebaceous treatment, the time of resection is controversial, but most investigators suggest that surgical excision is the treatment of choice2. However, removing nevus sebaceous by surgical excision leaves linear scar. To minimize scar, there were several other treatment options include CO2 laser treatment. But CO2 laser vaporization removed only the portion of the nevus sebaceous that lies at the epidermis or papillary dermis, but did not remove the entire lesion2. So there was possibility of recurrence after laser treatment. There is no study of recurrence after CO2 ablation of nevus sebaceous, but there are several reports of recurrence of epidermal nevus after CO2 laser treatment. According to prior investigation, epidermal nevus has a recurrence rate of 20% for 10 months, 30% for 18 months after CO2 laser treatment3,4. Because of the characteristic of CO2 laser treatment, nevus sebaceous seems likely to have a similar recurrence rate of epidermal nevus. To prevent recurrence, we treated her with isotretinoin and kept in good state for 12 months. Isotretinoin inhibit sebum production by decrease in size of differentiated sebocytes and the reduction in their metabolic activity, also it makes significant reduction in sebaceous gland volume5. We suggest that these isotretinoin’s effects about sebaceous gland keep lesions in good state without recurrence. Treatment with CO2 laser treatment combined with isotretinoin can be good option for nevus sebaceous treatment without scar. However, dermatologist should keep in mind incomplete removal of nevus sebaceous and risk of malignancy in residual lesion. Therefore periodic and long term follow up is needed for these patients. Here we report successful treatment of nevus sebaceous with CO2 laser treatment combined with isotretinoin.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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DATA SHARING STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Dermatofibroma Transitioned to a Sclerotic Fibroma-Like Change Showing Delicate Reticulated Vessels in Dermoscopy

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Dear Editor:

Sohn et al. reported the first case of dermatofibroma (DF) with sclerotic areas resembling a sclerotic fibroma (SF), in which transitional areas from DF to SF could be detected. A 55-year-old Japanese female presented with a dome-shaped, firm, light-brown nodule, measuring 3 mm in diameter on the abdomen (Fig. 1A). The surface of the nodule revealed a hypopigmented pinkish area in the center (Fig. 1A). Dermoscopy showed a hypopigmented pinkish area with delicate reticulated vessels in the center (Fig. 1B, C), surrounded by brown pigmentation (Fig. 1C). She had no history of trauma. Histological examination demonstrated a relatively well-demarcated, non-encapsulated dermal nodule, the uppermost portion of which transitioned into an oval, eosinophilic area directly below the attenuated epidermis (Fig. 2A). The non-encapsulated dermal nodule was composed of spindle cells and collagen bundles in a vague storiform arrangement, consistent with DF (Fig. 2B). The oval, eosinophilic area was composed of hypocellular hyalinized collagen bundles with prominent clefts (Fig. 2C). The arrangement was reminiscent of a storiform pattern (Fig. 2C). The histological findings were characteristic of SF. In the transition area, DF shifted gradually into SF (Fig. 2D). The overlying epidermis was attenuated right above the SF area, and was hyperplastic with basal hyperpigmentation in the periphery (Fig. 2E). Immunohistochemically, a few spindle cells in the DF nodule were positive for factor XIIIa and CD34 (Fig. 2F), contrary to the cells in the SF area.

Rapini and Golitz first reported a solitary SF in the absence of other manifestations of Cowden’s disease. Sohn et al. insisted that SF was an ancient or degenerated stage of DF. Furthermore, SF was also speculated to be a scler-