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Primary Angiosarcoma of the Skin Presenting as Mild Erythema

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Dear Editor:

An 83-year-old man presented with a 3-month history of asymptomatic, ill-demarcated, mild erythema on the left zygomatic area (Fig. 1). He had no remarkable family or personal medical history. He had previously been prescribed oral dermatological medication from a private clinic, which he took for 1 month. Despite treatment, the lesion progressively increased in size. Non-specific mild erythema or early-stage erysipelas was suspected. Complete blood cell counts, basic biochemistry results, and inflammatory marker levels were within normal limits. Furthermore, bacterial cultures revealed no growth. Histopathological findings indicated proliferation of atypical endothelial cells with a network of irregular anastomosing vessels, consistent with angiosarcoma (Fig. 2A～C). On immunohistochemical staining, endothelial cells stained for CD31, and lymphatic endothelial cells stained for D2-40 and Prox-1 (Fig. 2D～F). Regional lymph node involvement or distant metastasis was not observed on computed tomography of the chest and orbit. The patient underwent six sessions of radiotherapy at 1-week intervals, and the tumor regressed.

Angiosarcoma is a rare, aggressive neoplasm of vascular endothelial cells[1]. In addition to primary angiosarcoma, there are two other variants: post-radiation angiosarcoma and angiosarcoma in areas of chronic lymphedema. Initially,

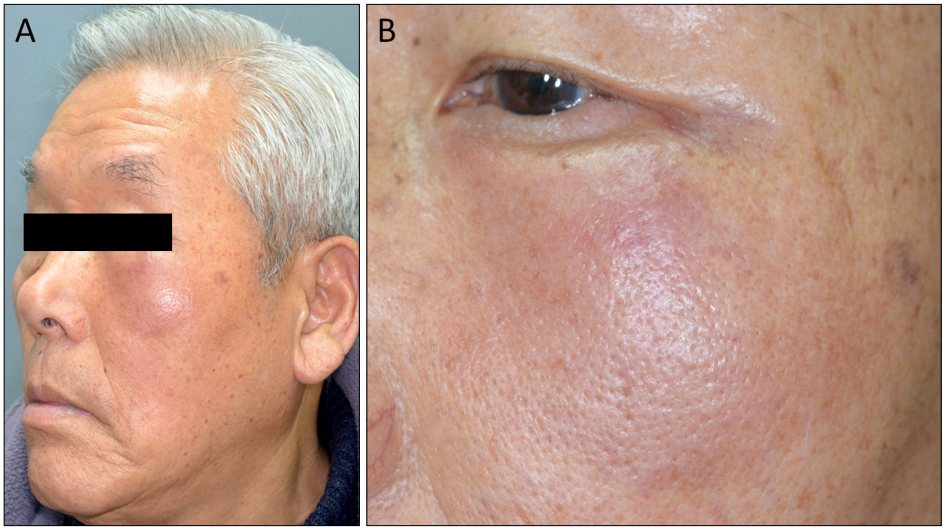

Fig. 1. (A, B) Ill-demarcated, indurated erythema in the left zygomatic area.

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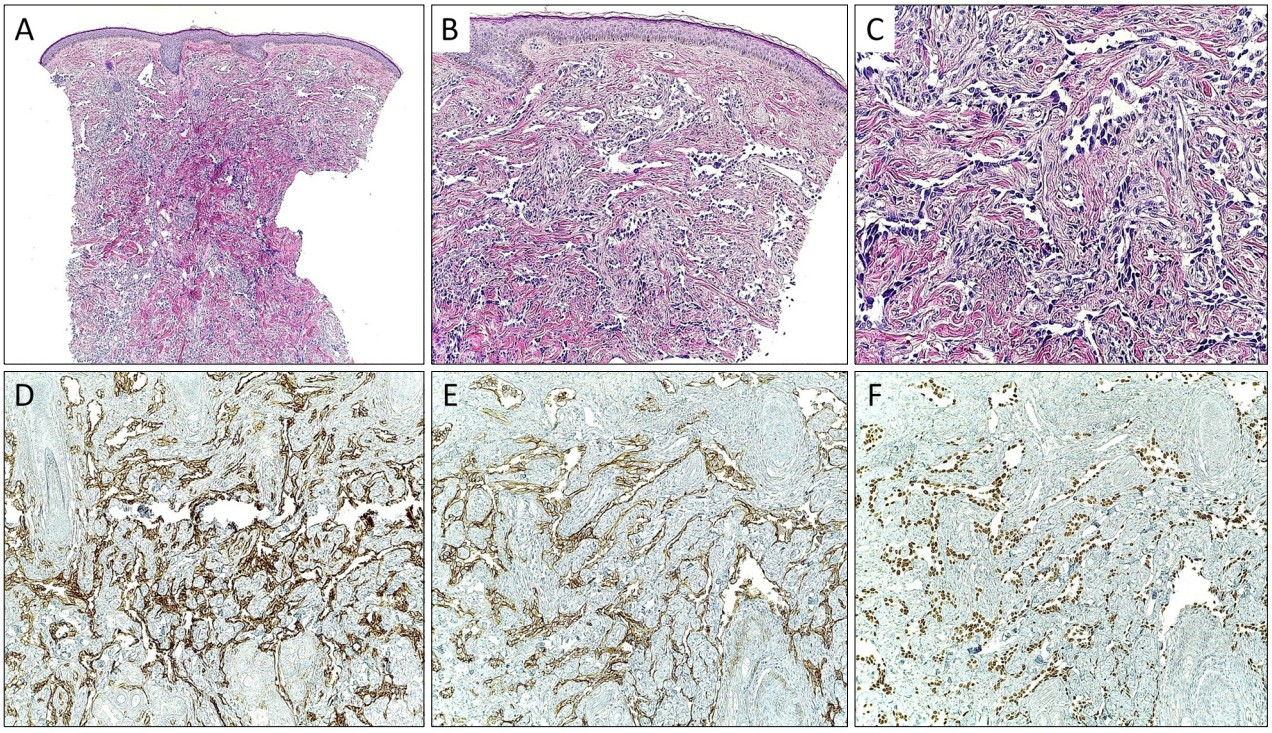

Fig. 2. An irregular anastomosing vascular space lined with atypical endothelial cells (H&E; A: ×40, B: ×100, C: ×200). Immunohistochemical analysis of the lesion shows tumor cells stained for (D) CD31, (E) D2-40, or (F) Prox-1. D~F: ×100.

primary angiosarcoma of the skin presents as solitary or multiple purpuric patches on the face, neck, or scalp. Early lesions can be confused with other skin lesions, such as bruises[2], salmon patches, hemangiomas, hematomas[3], rosacea[4], rhinophyma[5], and early Kaposi's sarcoma. The patient in this case exhibited a unique clinical feature, in that he presented with mild erythema rather than with angiosarcoma. Histopathology and immunohistochemical staining revealed collagen-dissecting atypical vascular proliferation, consistent with angiosarcoma. It can be challenging to diagnose mild erythema as angiosarcoma, so we emphasize the need to consider malignancy in the differential diagnosis of prolonged mild erythema.

CONFLICTS OF INTEREST

The authors have nothing to disclose.

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