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Single Vesicular Papule on the Eyelid with Atypical Histopathology Findings

Moo Yeol Hyun, Joon Seok, Kui Young Park, Beom Joon Kim, Seong Jun Seo, Chang Kwun Hong

Department of Dermatology, Chung-Ang University College of Medicine, Seoul, Korea

Dear Editor:

A 52-year-old man presented with a 2×2 mm small painless vesicular papule on his left upper eyelid (Fig. 1). The lesion was noted approximately four months prior and had increased in size during the two months preceding medical examination. The patient had no history of pain or visual field defect. On physical examination, the papule was well-demarcated and pedunculated with a smooth surface. It was firm in consistency and was non-tender.

The mass was clinically thought to be a benign tumor, such as an apocrine hidrocystoma. We removed the tumor by shaving with carbon dioxide laser ablation, and the specimen was sent to the department of pathology for evaluation. Histopathology demonstrated a well-circumscribed, cribriform, intradermal tumor without an outer myoepithelial layer or a connection to the epidermis (Fig. 2A). The tumor cells were cuboidal with eosinophilic cytoplasm, and decapitation secretion was observed (Fig. 2B). The tumor cells did not show definite cytologic atypia; pleomorphism was observed but not marked, and prominent nucleoli and mitoses were not found (Fig. 2C). Immunohistochemical staining for cytokeratin (CK) 7 was positive, and CK20 was weakly positive (Fig. 2D, E). The tumor cells were negative for estrogen receptor/progesterone receptor (ER/PR). The lesion was diagnosed as a primary apocrine adenocarcinoma (PAA), and we presumed this tumor arose in the glands of Moll. We suggested wedge resection and precise examination, but he refused it as he lived in Tanzania.

PAA of the eyelid is a very rare tumor that originates from apocrine glands such as the glands of Moll in the eyelid[1]. The tumor usually presents as painless, blue-brown, intradermal nodules or masses with a solid-to-cystic aspect[2]. Clinically, patients generally present in their sixth to seventh decade[3], and there is no racial preference. However, men are affected more often than women (5:3)[4]. The behavior of PAA may vary from relative indolence to aggressive metastasis. When it progresses aggressively and

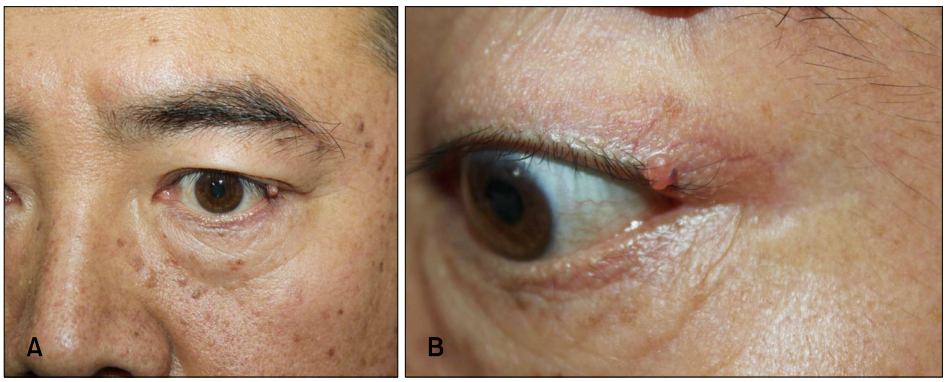

Fig. 1. Skin findings of the present case. Single, 0.2×0.2 cm, well-demarcated, yellowish, pedunculated vesicular papule on the left upper eyelid.

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Corresponding author: Kui Young Park, Department of Dermatology, Chung-Ang University Hospital, 102 Heukseok-ro, Dongjak-gu, Seoul 06973, Korea. Tel: 82-2-6299-1525, Fax: 82-2-823-1049, E-mail: kyky@medimail.co.kr

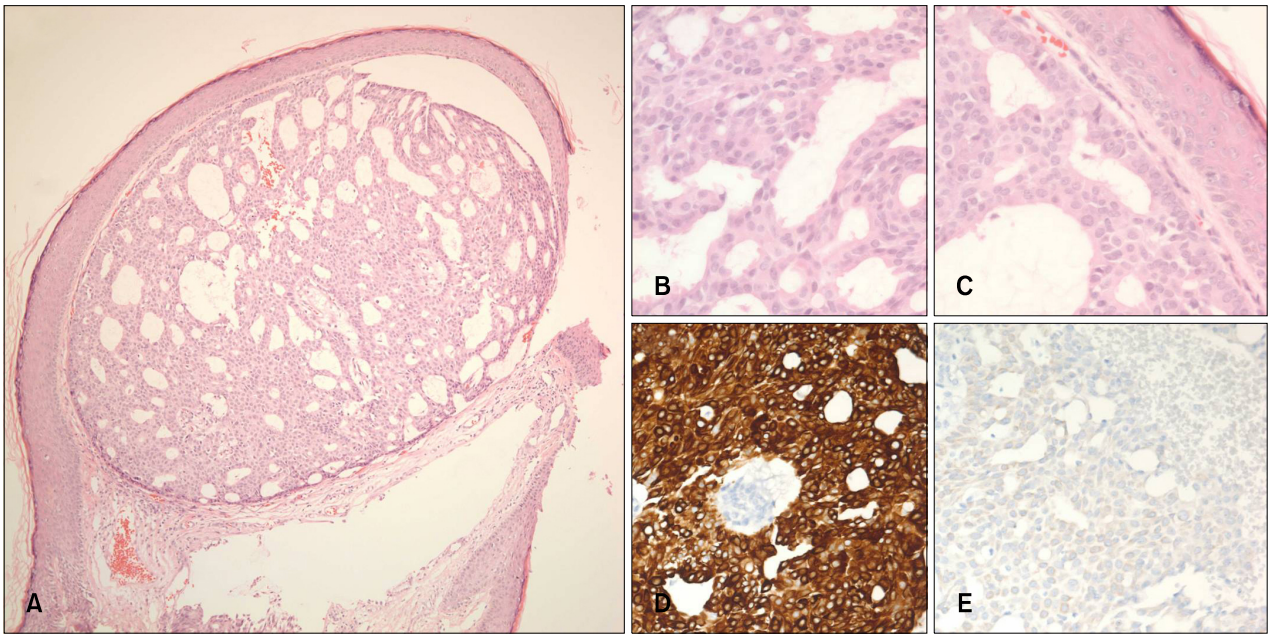

Fig. 2. Histopathologic findings of present case. (A) A well-circumscribed, oval shaped, cribriform intradermal tumor was observed without connection to the epidermis (H&E, ×40). (B) The tumor cells were cuboidal with eosinophilic cytoplasm, and decapitation secretion was observed (H&E, ×200). (C) Tumor cells did not show definite cytologic atypia or an outer myoepithelial layer (H&E, ×200). (D) Immunohistochemical stain for cytokeratin (CK) 7 was positive and (E) CK20 was weakly positive (D, E: ×100).

metastasizes, it is commonly detected at diagnosis[5].

The histopathology of this tumor is characterized by gland-like structures and definite malignant histologic characteristics. Tumor cells have typically eosinophilic or opaque glass-like cytoplasm and form irregularly shaped luminae of varying sizes with decapitation secretion[1]. PAAs originating from the glands of Moll usually show positive results for CK 7, gross cystic disease fluid protein 15, carcinoembryonic antigen, epithelial membrane antigen and S-100, but negative results for ER/PR and smooth muscle actin (SMA)[2]. Because the myoepithelial layer can be highlighted with SMA, it is useful in making differential diagnosis between PAA and other apocrine origin benign tumors based on the presence of the myoepithelial layer.

In this case, the tumor nest was well-circumscribed without an infiltrative border, and the tumor cells revealed bland cytologic features. All of these findings lead to a differential diagnosis of benign apocrine tumor, such as tubular apocrine adenoma or apocrine hidrocystoma. These can be distinguished from PAA in that both have an outer myoepithelial lining.

In conclusion, because PAA can take an aggressive course with metastatic spread, tumors seated in the eyelids with benign clinical features should not be disregarded and should be removed carefully and biopsied.

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