Dermoscopic clues for sebaceous carcinoma arising in nevus sebaceous

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To the Editor: Sebaceous carcinoma (SC) is a rare cutaneous malignant tumor differentiated from the epithelium lining and arising from the sebaceous gland.[1] Consequently, nevus sebaceous (NS) tends to develop into a benign or malignant neoplasm.[2] Herein, we report dermoscopic findings in a rare case of SC arising in NS with protruding nodule in erosive erythematous surface rapidly arising from yellow pigment plaque resulting in no recurrence. Dermoscopy is a powerful diagnostic tool to generate a preoperative diagnosis.

A 40-year-old Chinese woman presented with a yellowish pruritic nodule arising over a verrucous plaque at the center of the forehead, accompanied by pain for 6 months. The patient had a history of hairless yellowish plaque at the center of the forehead. Physical examination revealed a nodule measuring 0.5 cm × 0.5 cm arising over a yellowish plaque associated with erosion [Figure 1A]. Dermoscopy of verrucous plaque showed aggregated yellow globules with non-arborizing crown vessels [Figure 1B]. Dermoscopy of nodule showed yellowish inhomogeneous areas, polymorphous vessels, whitish superficial scaling, and erythematous lesion [Figure 1C]. Histopathology of the nodule revealed pleomorphic lobules, vacuolated cells, foamy cytoplasm with scalloped nuclei, prominent nucleoli, and mitotic figures in the dermis [Figure 1D and 1E]. Immunohistochemistry demonstrated cytokeratin 7 [Figure 1F] and tumor protein (P63) positive [Figure 1G], epithelial membrane antigen partly positive, epithelial glycoprotein (BerEp4), and carcinoembryonic antigen negative. Computed tomography of the head showed no evidence of metastases. Diagnosis of SC arising in NS was confirmed. Wide local excision with a 1-cm margin was carried out. There has been no evidence of recurrence during 12 months of follow-up.

SC arising in NS is extremely rare, only 25 cases have been reported in the literature.[3,4] The estimated frequency of secondary neoplasms arising in NS is less than 0.1%, among which basal cell carcinoma, trichoblastoma, squamous cell carcinoma, sweat gland carcinoma, syringocystadenoma papilliferum, apocrine cystadenoma, etc, also might occur.[3,4] Undoubtedly, histopathology and immunohistochemistry assist in the diagnosis. Early detection of lesions on dermoscopy may also help in the diagnosis.

Skin lesions of SC in NS are predominantly located on the scalp, forehead, and eyes classified into extraocular and ocular. In the present case, dermoscopy of yellowish inhomogeneous area correlated to the foamy cytoplasm in the histopathology.[5] Similarly, polymorphic vessels (hairpin, linear, and crown) appearing irregularly in the dermoscopy were considered to be caused by telangiectasia and malignancy.[5] Dermoscopy of NS can be differentiated from SC in the presence or absence of non-arborizing (crown) and polymorphic vessels, respectively. Dermoscopy of basal cell carcinoma and trichoblastoma are composed of asymmetrical and symmetrical large blue-gray ovoid nest, respectively.[2] Dermoscopy of syringocystadenoma papilliferum comprises of exophytic papillary structure with ulceration and vessels.[2] Dermoscopy of apocrine hidrocystomas consists of a symmetrical homogenous area with arborizing telangiectasias.[2] These features may help in distinguishing it from similar lesions.

To our knowledge, the dermoscopic combination of SC arising from NS has not been reported.[4] As SC arising in NS is a low-grade malignancy, early detection of lesions on dermoscopy could lead to successful control and treatment preventing further metastasis. Therefore, timely recognition may prevent delayed diagnosis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given

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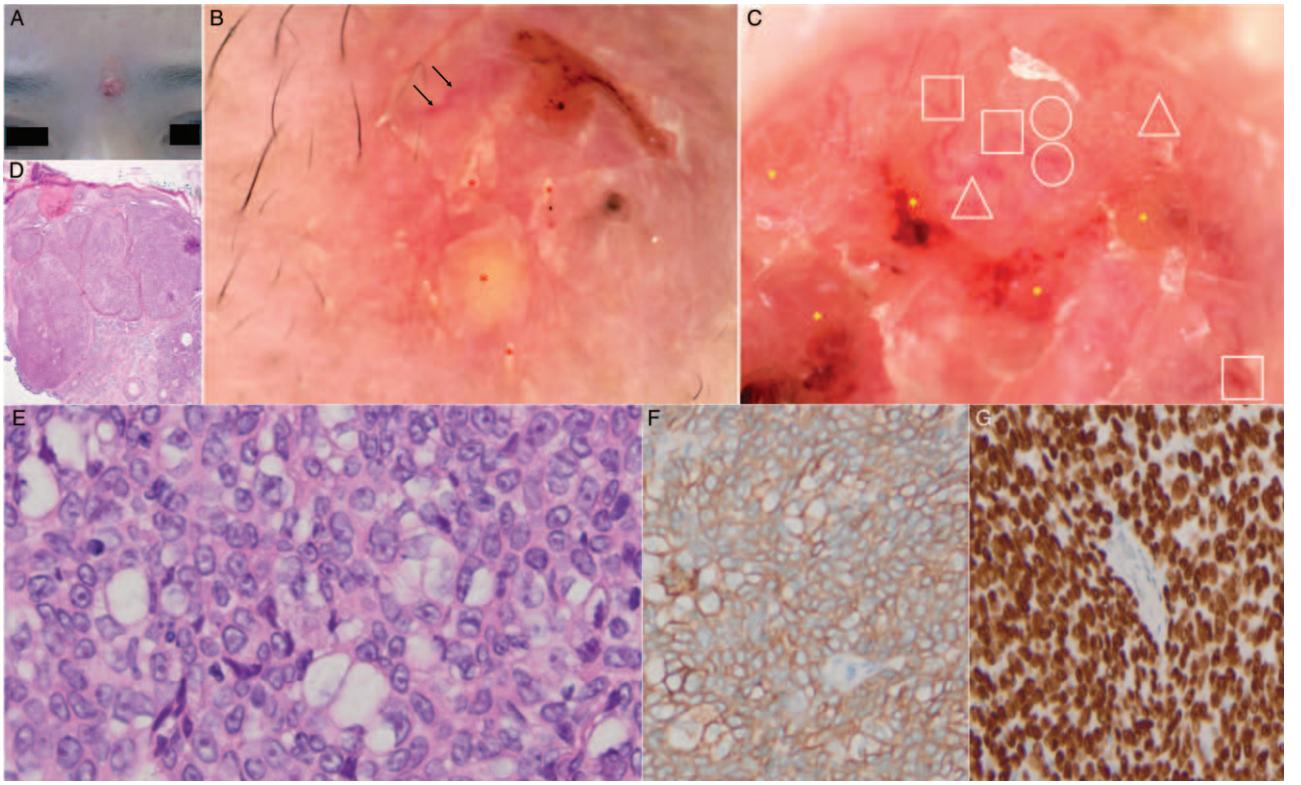

Figure 1: (A) A 40-year-old woman showed a yellowish nodule arising over a verrucous plaque at the center of the forehead. (B) Dermoscopy (JD801D; JEDA, China) of verrucous plaque revealed aggregated yellow globules (red asterisks) with non-arborizing crown vessel (black arrows) (original magnification ×40). (C) Dermoscopy of the nodule demonstrated yellowish inhomogeneous areas (yellow asterisks), polymorphous vessels (hairpin [rectangular box], linear irregular [circular box], and crown [triangular box]), whitish superficial scaling, and erythematous lesion (original magnification ×40). (D) Histopathology of the nodule revealed lobules of pleomorphic cells infiltrating into the dermis (hematoxylin-eosin [HE] staining, original magnification ×20). (E) The cells grew variably in size with vacuolated cells, foamy cytoplasm, and scalloped nuclei. The cells exhibited prominent nucleoli and frequent mitoses (HE staining, original magnification ×200). Immunohistochemistry showed positive staining for cytokeratin 7 (F) and tumor protein P63 (G) (original magnification ×200).

her consent for her images and other clinical information to be reported in the article. The patient understands that her name and initials will not be published and due efforts will be made to conceal the identity of the patient, although anonymity cannot be guaranteed.

Conflicts of interest

None.

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