ONLINE EXCLUSIVE

Slow-growing lesion on eyebrow

It took a dermatoscopic examination followed by an e-consultation and shave biopsy to arrive at the diagnosis.

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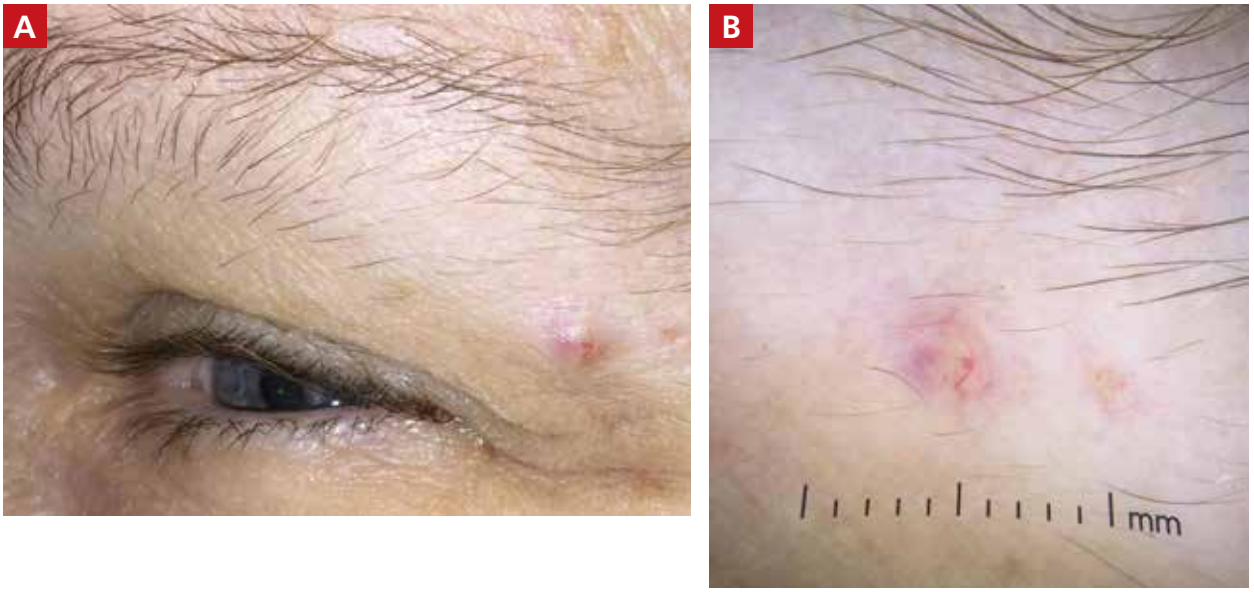
A 51-YEAR-OLD WOMAN presented to the family medicine clinic for evaluation of a slightly tender skin lesion on her left eyebrow. The lesion had been slowly growing for a year.

The patient's family history included multiple family members with colon or breast cancer and other relatives with pancreatic and prostate cancer. A colonoscopy performed a year earlier on the patient was negative. The patient's past medical history included hypertension, major depressive disorder, hyperlipidemia, and venous insufficiency. She also had a colon polyp history.

Physical examination of the eyebrow showed a 3-mm papule that was firm on palpation. Dermoscopy of the lesion revealed a yellow papule with an overlying telangiectasia (**FIGURE 1A** and **1B**). Although the lesion appeared benign, the treatment team and the patient agreed to pursue a consultation. The dermoscopy images were sent to a dermatologist to help identify the lesion.

- WHAT IS YOUR DIAGNOSIS?
- HOW WOULD YOU TREAT THIS PATIENT?

FIGURE 1
Dermoscopy revealed overlying telangiectasia in eyebrow lesion



PHOTOS COURTESY OF MAYO CLINIC

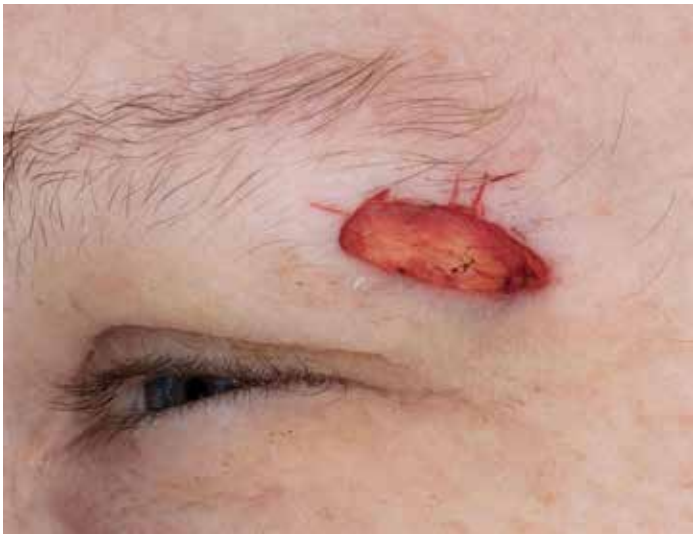
Diagnosis: Sebaceous carcinoma

A rapid teledermatology consultation helped us to determine that this was a sebaceous lesion, but its location and the overlying telangiectasia raised concerns for malignancy. After shared decision-making with the patient, she agreed to proceed with a biopsy. We first made an incision into the lesion, which was hard, demonstrating that it was not cystic. A shave biopsy was then completed. The dermatopathology findings showed clear-cell change consisting of bubbly or foamy cytoplasm, with scalloping of the nuclei, which is characteristic of a sebaceous origin. There were tumor cells that were enlarged with pleomorphism, multiple nucleoli, and scattered mitotic figures. These findings pointed to a diagnosis of sebaceous carcinoma.

Sebaceous carcinomas most commonly manifest on the eyelids. They can originate from the Meibomian glands as well as from pilosebaceous glands at other sites on the body.[1] They are rare, accounting for only 1% to 5% of eyelid malignancies, and occur in approximately 2 per 1 million people.[1] Tumors can invade locally and metastasize, particularly to surrounding lymph nodes. Periocular pathology may sometimes lead to misdiagnosis, which contributes to a mortality rate that has been reported as high as 20%.[1] Suspicion for malignancy may arise due to ulceration, bleeding, pain, or rapid growth.

FIGURE 2

Defect created by removal of the lesion after Mohs surgery



A lesson in considering the full differential

While sebaceous lesions on the eyelid and eyebrow are often benign, this case underscored the importance of considering the more worrisome elements in the differential. The differential diagnosis for lesions in the area of the eye include the following:

Sebaceous hyperplasia is a common condition (typically among older patients) in which sebaceous glands increase in size and number.[2] The classic clinical feature is yellow or skin-colored papules. The lesions typically manifest on the face—particularly on the forehead. They are benign and often have a central umbilication.[2]

Sebaceous adenomas are benign tumors that may manifest as tan, skin-colored, pink, or yellow papules or nodules.[2] The lesions are usually asymptomatic, small, and slow growing.[2]

Basal and squamous cell carcinomas. Basal cell carcinomas often feature translucent lesions on areas of the skin that are exposed to sunlight. These lesions often have slightly rolled border edges or overlying branching telangiectasia and may be nodular.[3] Squamous cell carcinomas often feature scaled, reddened patches that may become tender and ulcerate.[4]

Hordeolums and chalazions. A hordeolum (or stye) is a painful, acute, localized swelling of the eyelid.[5] These often develop externally at the lid margin from infection of the follicle. A chalazion is characterized by a persistent, nontender mass that results from small, noninfectious obstruction of the Meibomian glands with secondary granulomatous inflammation.[5]

Dermoscopy can (and did) help with the Dx

Dermoscopy can help confirm whether a lesion has a sebaceous origin because it would show yellow globules with "crown vessel" telangiectasias that classically do not cross midline.[6] Unfortunately, the findings of yellow

globules and dermal vessels do not adequately differentiate benign from malignant lesions.[6] Carcinomas can manifest in an undifferentiated way early in their course.

Sebaceous carcinomas can be associated with the autosomal dominant Muir-Torre syndrome, a subset of the Lynch syndrome.[7,8] Colorectal and genitourinary carcinomas are the most common internal malignancies seen in patients with Muir-Torre syndrome.[9]

Patients benefit from Mohs surgery

Treatment outcomes for sebaceous carcinoma appear to be improved by Mohs surgery. In a recent review of 1265 patients with early-stage sebaceous carcinomas, Su et al found that 234 patients who were treated with Mohs surgery had improved overall survival, compared with 1031 who were treated with surgical excision.[10]

Our patient was referred to a Mohs surgeon who removed the lesion (**FIGURES 2** and **3**). Given the overall small tumor size, a sentinel lymph node biopsy was not necessary. Because of the patient's family history, which was suggestive of a genetic predisposition to cancer, she requested a clinical genetics consultation for definitive testing. She went on to pursue genetic testing, which came back negative for Lynch syndrome genes.

The dermatologist recommended yearly skin examination for 5 years for the patient. **JFP**

FIGURE 3

Closure of the defect

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