Photo Quiz

Pigmented Nodule Below the Eye

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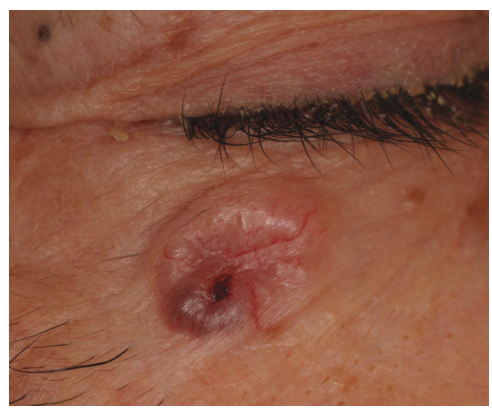

A 58-year-old white man presented to the outpatient clinic with a single asymptomatic nodule on his face that had appeared months earlier. He had no history of skin cancer. The nodule was 1.5 × 1 cm, translucent, and located below the right lateral lower eyelid *(see accompanying figure)*. The nodule had not changed in size or color, and there was no drainage or bleeding.

Question

Based on the patient's history and physical examination, which one of the following is the most likely diagnosis?

- ❑ A. Malignant melanoma.
- ❑ B. Melanocytic nevus.
- ❑ C. Pigmented basal cell carcinoma.
- ❑ D. Seborrheic keratosis.
- ❑ E. Solar lentigo.

See the following page for discussion.

Discussion

The answer is C: pigmented basal cell carcinoma. Basal cell carcinoma is the most common malignancy, with more than 800,000 new cases diagnosed annually in the United States.[1] The tumor is more common in men and persons with light skin. The main risk factor for the disease is a history of ultraviolet light exposure.[2] Pigmented basal cell carcinoma usually occurs on sun-exposed areas of skin, such as the head and neck. The main clinical features are translucency, overlying telangiectasia, rolled border, and occasionally ulceration.[1] Pigment is present in all or part of the neoplasm in 6 percent of basal cell carcinomas,[3] although this does not affect treatment or prognosis.

The choice of therapy for basal cell carcinoma depends on histologic features, location of the lesion, and patient factors. Topical chemotherapy with fluorouracil,[4] the immunomodulator imiquimod (Aldara),[5] and electrodesiccation and curettage can be considered for superficial lesions. Conventional excision with 3-mm margins is often used for low-risk and well-defined tumors. Mohs micrographic surgery is a tissue-sparing technique that allows for precise identification and removal of the entire tumor while leaving the surrounding healthy tissue intact. Mohs micrographic surgery has the highest cure rate for nonmelanoma skin cancer and is reserved for high-risk and poorly defined tumors. X-ray radiation therapy is used for patients who are not surgical candidates or who have unresectable tumors.[6]

Malignant melanoma is a malignancy of melanocytic origin. It often appears as a multicolored, asymmetric macule or papule with irregular borders and a diameter of greater than 5 mm. The risk of metastasis is directly related to the thickness of the primary cutaneous tumor.[7]

Melanocytic nevus is a benign, verrucous, polypoid or sessile lesion with uniform pigmentation and a smooth border. The lesion is symmetric, smooth, flesh-to-brown colored, and flat or raised.[7]

Seborrheic keratosis is a benign proliferation of keratinocytes with a rough-to-waxy surface. These lesions are often pigmented.[7]

Solar lentigo is a brown macule on sun-exposed skin. This lesion is a marker of sun damage, but does not progress to skin cancer.[7]

Summary Table

Condition	*Characteristics*
Malignant melanoma	Asymmetric, multicolored macule or papule with irregular borders; greater than 5 mm in diameter
Melanocytic nevus	Verrucous, polypoid or sessile lesion, uniform pigmentation, smooth border, symmetric, smooth, flesh-to-brown color, flat or raised
Pigmented basal cell carcinoma	A plaque or nodule with translucency, overlying telangiectasia, rolled border, occasionally ulceration
Seborrheic keratosis	Rough-to-waxy surface, often pigmented
Solar lentigo	Brown macule on sun-exposed skin; does not progress to skin cancer

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