

Photo Quiz

Changing Facial Lesion

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This series is coordinated by John E. Delzell, Jr., MD, MSPH, Assistant Medical Editor.

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Figure 1.

A 70-year-old black woman presented with an enlarging lesion on the left side of her face. The lesion had been present as long as the patient could remember, likely since birth. It had slowly enlarged as she aged. Recently the lesion had begun to change in appearance, and the patient developed new associated pruritus, pain, and bleeding.

The physical examination revealed a 6-cm × 1-cm linear verrucous lesion extending from the anterior helix of the left ear down to the level of the ear lobe (*Figure 1*). The lesion was hyperpigmented and raised, and consisted of papules and

nodules. There was an area of excoriation near the distal end of the lesion where one of the nodules had torn away from the base.

Question

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

- A. Keratoacanthoma.
- B. Nodular basal cell carcinoma.
- C. Sebaceous nevus.
- D. Squamous cell carcinoma.

See the following page for discussion.

Discussion

The answer is C: sebaceous nevus. These lesions generally are present at birth or develop in early childhood. The most common sites of growth are the scalp and forehead. The lesions evolve along with the normal development of sebaceous glands, with changes most notable during puberty. In early childhood, the lesions are plaque-like and waxy. With pubertal changes, the lesions become larger and more verrucous.¹

Secondary benign and malignant neoplasms can develop in the primary nevus, typically in middle-aged adults, although this is rare.¹ An estimated 8% of sebaceous nevi develop malignant tumors,² most commonly basal cell carcinoma. Other malignant transformations that may develop are sebaceous carcinoma, squamous cell carcinoma, and keratoacanthoma.²

Surgical excision is the treatment of choice for a sebaceous nevus, preferably at a young age to decrease the risk of neoplastic transformation.¹ Schimmelpenning syndrome consists of sebaceous nevi, mental retardation, and seizures.³

Keratoacanthomas are papules with a horny keratin plug. They most commonly develop in middle or older age, and typically

occur on sun-exposed areas in fair-skinned persons. They are characterized by rapid growth and involution with resolution within nine months of appearance.⁴

Nodular basal cell carcinoma is rare in black persons. It sometimes develops in a sebaceous nevus in children, although this is uncommon.³ Nodular basal cell carcinoma usually develops on the face, and the classic presentation is a pearly white lesion with telangiectasia and ulceration.⁵

Squamous cell carcinoma most often occurs on sun-exposed areas in older, fair-skinned individuals. In dark-skinned persons, it is more likely on non–sun-exposed areas or at sites of chronic scarring. The lesions typically appear as scaly patches or plaques.⁶

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Summary Table

Condition	Characteristics
Keratoacanthoma	Papules with a horny keratin plug; rapid growth and involution with resolution within 9 months; most common on sun-exposed areas in fair-skinned persons
Nodular basal cell carcinoma	Pearly white lesions with telangiectasia and ulceration; occurs mostly on the face; uncommon in black persons
Sebaceous nevus	Present at birth or develops in early childhood, with rapid growth during puberty; secondary malignancies may develop; commonly occurs on the scalp and forehead
Squamous cell carcinoma	Scaly patches or plaques; in fair-skinned persons, it occurs on sun-exposed areas; in dark-skinned persons, it occurs on non–sun-exposed areas or at the site of chronic scarring