Dermatology Digest

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FIGURE 1
Suspicious plantar lesion

Early detection saves an elderly woman

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CASE

An 87-year-old white woman presented to our dermatology office for evaluation of a nonhealing wound on the great toe of her right foot. The lesion had been present for approximately 1 year. The patient attributed the sore to constantly bumping her toe on her walker. A podiatrist had been treating the wound with triple antibiotic ointment for the past 3 months. The patient denied having fever, chills, pain, bleeding, or discharge from the toe. She had a history of hypertension and diabetes. She denied any history of premalignant skin lesions, skin cancer, or malignant melanoma, and she said there was no family history of melanoma.

Physical examination of the plantar surface of the hallux on her right foot revealed an asymmetric, 1-cm dark brown lentiginous patch with irregular borders (see Figure 1). Superior and medial to the patch was a 0.6-cm gelatinous nodule on a dark brown-black base. Brown pigmentation was seen on the proximal, medial, and lateral nail folds. The nail and subungual region were not visible because the patient's nails were covered with polish. No warmth, discharge, or tenderness was noted on palpation.

WHAT IS THE DIAGNOSIS?

- *Subungual hematoma*
- *Pyogenic granuloma*
- *Acral lentiginous melanoma*
- *Pyoderma gangrenosum*

DISCUSSION

The correct diagnosis was acral lentiginous melanoma (ALM). Although this condition is rarely seen in whites, the physical presentation of the lesion places ALM high in the differential diagnosis. The *a*symmetry, *b*order irregularity, *c*olor variation, and *d*iameter enlargement are referred to as the ABCDs of melanoma recognition. The brown pigmentation on the nail folds demonstrated Hutchinson's sign, which is seen in ALM.

A subungal hematoma usually causes pain and is not associated with the pigmentation changes seen on this patient's toe. The absence of bleeding with trauma to the toe makes pyogenic granuloma an unlikely diagnosis. Pyoderma gangrenosum is typically rapidly progressive, painful, and suppurative.

Melanoma is a malignant degeneration of the melanocytes that can develop in any tissue with pigmentation but most commonly occurs on the skin. Melanoma is one of the most dangerous skin tumors because it can rapidly invade the deeper levels of skin and metastasize to other organs. The patient with early-stage melanoma can be saved, but the prognosis is poor in the later stages of disease: 75% of skin cancer deaths in the United States are from melanoma.

Patients at the highest risk for developing a malignant melanoma are those with a personal history of atypical moles, a family history of melanoma, and the presence of more than 75 to 100 moles on their body. Other risk factors include repeated blistering sunburns, chronic tanning with UVA light from a tanning machine, and fair skin.

TREATMENT A biopsy confirmed the diagnosis of ALM. This patient's lesion was determined to have, at the least, a Clark's Level III of invasion. The patient was urgently referred to a surgical oncologist. She underwent an amputation of the hallux with sentinel node biopsy. The surgical margins were free of malignant melanoma and the sentinel lymph node was negative for metastatic disease. JAAPA

Joe R. Monroe, PA-C, MPAS, department editor