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CASE

The patient is an 80-year-old white man who was referred by his primary care physician to the orthopedic surgery clinic at the end of December 2003 for evaluation and treatment of his right thumbnail, which was splitting and discolored. Symptoms began in April 2003 with a split nail. In June 2003, the patient noticed an open wound on the distal tip of the right thumb; then in September 2003, he noticed the right thumbnail changing color. The patient denied any traumatic event or injury to the thumb.

History The patient reported no history of problems with his nails and no family history of similar nail problems. He had a history of hypertension, angina, hypothyroidism, hypercholesterolemia, and depression. The surgical history included cardiac bypass grafting in 2000 and cataract surgery. Current medications included daily oral atenolol, amlodipine, levothyroxine, aspirin, simvastatin, citalopram, and temazepam. The patient denied alcohol use and acknowledged stopping smoking 10 years before.

Physical examination Examination of the right thumb revealed splitting of the nail and an open wound at the tip. There was no drainage. Degenerative changes, discoloration, and darkening of the nail were seen (see Figure 1). Hutchinson's sign, a dark discoloration of the proximal nail fold that raises the suspicion of nail melanoma, was not present. Radiographic evaluation of the right thumb was negative.

WHAT IS YOUR DIAGNOSIS?

- Glomus tumor
- Pyogenic granuloma
- Benign nevus
- Pigmented melanoma

DISCUSSION

The patient underwent excision of the mass and pigmented lesions at the distal tip of the thumb. The pathologist's report, delivered by telephone, indicated malignant melanoma, deep and aggressive, invasive, and incompletely excised. One week later, the patient had a right thumb amputation at the level of the interphalangeal joint. The pathology report stated that the resection margins were free of melanoma. A whole body bone scan was negative for metastatic disease. The postoperative course was uneventful, and the thumb healed well (see Figure 2). The last follow-up visit was at 4 months postsurgery: the

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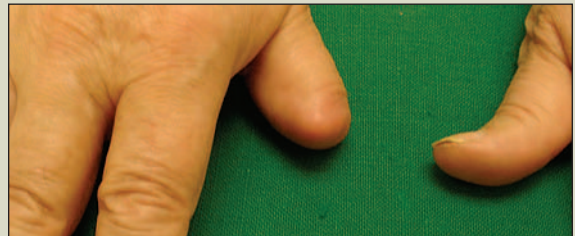
FIGURE 1

The thumb at presentation



FIGURE 2

The thumb after treatment



patient continued to do well, and no recurrence was noted. We cautioned him to report any change or concern immediately and released him from our office.

Comment Initially, we had thought that this patient could have cellulitis and/or a pyogenic granuloma because of the presentation and open wound at the thumb tip. However, because of the nail pigmentation, we also suspected a pigmented acral-lentiginous melanoma (ALM). This diagnosis fit with the patient's age and the thumb involvement.¹

A pigmented melanoma is a serious malignancy requiring a biopsy and further evaluation. ALM arises subungually or periungually, typically manifests as pigmentation and/or nail plate dystrophy, and accounts for 2% to 3% of melanomas in white persons aged 55 to 60 years.² Common sites involve the thumb and great toe. Nail apparatus melanoma has a poor prognosis, with 5-year survival rates of 35% to 50%.²

Our patient presented again in April 2005 with another mass at the base of the right thumb, ulnar side, which he had noticed about 3 weeks earlier. The mass was removed the following day. The pathology report indicated recurrent invasive malignant melanoma, and the patient was referred to Kansas University Medical Center for further evaluation and definitive treatment. □

REFERENCES

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