Large Fungating Malignant Melanoma of the Foot: A Rare Case
Presentation and Review of the Literature
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STATEMENT OF PURPOSE
A comprehensive search of exophytic, pedunculated malignant melanoma reveals a relative paucity in the literature. When narrowing that search into such lesions found in the foot and ankle, that rarity becomes more evident as most of the studies found are of the case study variety with limited to no mention of such lesions on the foot and/or ankle. We present a case of a 51-year-old Haitian male complaining of bleeding and pain to his right medial heel. He was noted to have a large, exophytic lesion that was ultimately diagnosed by the Pathology service as acral lentiginous melanoma.

CASE STUDY
The patient initially presented complaining of a large mass to his right medial heel complaining of continual bleeding and a foul odor. When he was evaluated in the emergency department, there was a large, spherical mass with a stalk-like base extruding from his right medial heel. He was afebrile with a low hemoglobin and hematocrit. All other routine labs were normal. An MRI was subsequently ordered of the foot and ankle, revealing an exophytic soft tissue mass extending from the subcutaneous layer of the medial heel. The mass was measured at approximately 6 x 5.6 x 3.5 cm (crescoidal x anteroposterior x transverse). No connection of the mass to the calcaneus nor any evidence of peritumoral reaction was noted. The patient was admitted for an extensive workup given the high suspicion for an aggressive neoplasm. A portion of the lesion was sent for frozen section and returned with a diagnosis of malignant melanoma. At that time, the decision was made to remove the exophytic portion from the base of the stalk. A CT of the chest, abdomen and pelvis was later obtained to evaluate for systemic metastases, which showed systemic involvement via two separate nodules in the lungs.

It was suggested that the patient undergo evaluation of the nodal basin and that a wide excision be performed of the mass excision site. The wide excision site and inguinal lymph nodes were examined via frozen section, revealing metastatic melanoma within one of three lymph nodes as well as melanoma within the wide excision site (Stage III Breslow’s depth). The margins from the wide excision site were clear.

The patient was then discharged and instructed to follow-up for wound care and also advised to undergo a complete regional lymph node excision. The Surgical Oncologist further recommended that he follow-up with an Oncologist for PET Scans and adjuvant interferon therapy. He did undergo the whole body PET CT three months later, revealing three new pulmonary nodules compared to his initial chest CT.

He was unfortunately lost to follow up during this period, but was readmitted eighteen months after his initial presentation for altered mental status. A CT of his head revealed multiple hemorrhagic brain metastases, and the patient expired three days later secondary to cardiac arrest.

LITERATURE REVIEW AND DISCUSSION
This is a case of an aggressive acral lentiginous melanoma with a unique clinical presentation. The literature, specifically in dermatologic and foot and ankle literature, is exceedingly sparse with regard to large, fungating lesions of this variety. Typically, these types of melanomas have been referred to in the literature as “pedunculated.” To the knowledge of this author, no specific case studies have been reported of this particular malignant presentation in the foot or ankle. Although the tumor within this patient was classified as an acral lentiginous melanoma, pedunculated melanomas are typically reported as a variant of nodular melanoma within the literature (1). It was first described in 1958 by Vogler et al., and with an almost non-existent radial growth phase followed by a rapid vertical growth phase, was considered a more aggressive variant of nodular melanoma (1.5). Vogler originally defined this variant as having more than 50% of the tumor mass located above the skin with a lateral melanocytic spread of less than three ridges from the stalk (1.5). A study by Manci et al. found a 5.8% incidence of the pedunculated configuration of melanoma after reviewing data on 552 melanomas at the University of Alabama Melanoma Registry in 1981 (2). The majority of these variants presented on the trunk, with some on other unusual sites such as the mucosa of the nose, hard palate, and anorectal junction (2). This study was performed using the CT scan at the time of diagnosis. However, many other reports were reported to stay from this original definition and also showed a wide variability of incidence (2-43%) (1). McGovern et al. in a study featuring a review of 2,296 melanoma cases showed that melanomas presenting with a pedunculated configuration typically presented with greater rates of ulceration and also greater Breslow’s depths, although their definition of pedunculated was slightly variable from the Vogler criteria (1.3). These two variables, ulceration and Breslow’s depth, have independently and consistently shown an increase mortality within the literature.

In this particular case, the patient presented with a polyphoid, exophytic melanoma with a deep portion of ulceration (approximately 1.0 cm at the time of wide excision) and near maximum Breslow’s staging upon initial presentation. Unique to this case was the patient’s relatively apathetic approach to managing his tumor, which led to him initially presenting with such an extensive mass on his right heel. Given the quality of his lesion at initial presentation, he unfortunately had a poor prognosis, and passed away less than two years after his initial visit. In other similar scenarios, it would follow that proper workup and timely treatment is essential for optimizing survivability.

REFERENCES

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