



2021 Annual Spring Virtual Meeting | Abstract Submission

**Phaeohyphomycosis mimicking squamous cell carcinoma in an immunocompromised male with a metal-penetrating injury**

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A 73-year-old male with a history of rheumatoid arthritis, treated with prednisone, methotrexate, and hydroxychloroquine, and prior stroke, anticoagulated with apixaban, presented with a 2 x 1 cm hyperkeratotic verrucous nodule on his right extensor knee that grew rapidly over two months. The initial differential included squamous cell carcinoma, inflamed seborrheic keratosis, and verruca vulgaris. A shave biopsy revealed pseudoepitheliomatous hyperplasia with atypical keratinocytes, most consistent with squamous cell carcinoma. At follow-up, the patient revealed that he had a metal-penetrating injury while welding, just prior to the onset of the lesion. In light of this information and his immunosuppressed status, another biopsy was obtained to confirm a diagnosis and rule out the possibility of a mycotic infection. Gram stain and Fite's acid-fast stain were both negative. However, analysis with Grocott's methenamine silver stain revealed pigmented, round, yeast forms. Culture of the lesion identified fungi of the *Exophiala* genus. Subcutaneous phaeohyphomycosis is a rare mycotic infection, most often caused by members of the *Exophiala* genus. The typical presentation involves a subcutaneous nodule or abscess that can be firm to fluctuant in nature.<sup>1</sup> Even in severely immunocompromised individuals, the infection tends to remain localized to the extremities or, less frequently, the face or scalp. Definitive treatment includes surgical excision with or without antifungal therapy.<sup>2</sup> Our patient was initially treated with oral terbinafine and excision with 5 mm margins. He was subsequently treated with Mohs surgery due to a positive margin and has been recurrence free through 4 months of follow up.

**References:**

1. Chintagunta S, Arakkal G, Damrla S, Vodapalli A. Subcutaneous phaeohyphomycosis in an immunocompetent Individual: A case report. *Indian Dermatol Online J.* 2017; 8(1):29-31. doi: 10.4103/2229-5178.198770.
2. Vranckx P, Valgimigli M, Heidbuchel H. The Significance of Drug-Drug and Drug-Food Interactions of Oral Anticoagulation. *Arrhythmia Electrophysiol Rev.* 2018;7(1):55-61. doi:10.15420/aer.2017.50.13

**Figure 1.** Hyperkeratotic verrucous nodule present on the patient's extensor knee.



**Figure 2.** Histopathologic image using Grocott's methenamine silver stain shows pigmented, round, yeast forms.

