

## Unmasking Malignancy: When Diabetic Foot Ulcers Conceal a Greater Threat

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### Introduction:

DFUs are a common complication of diabetes mellitus, often attributed to neuropathy and peripheral vascular disease. However, amidst the prevalence of DFUs, clinicians must remain vigilant for underlying malignancies, particularly squamous cell carcinoma (SCC), which can mimic the presentation of DFUs. Here, we present a case series highlighting the challenge of distinguishing between DFUs and possible malignancies of the foot, emphasizing the importance of thorough evaluation in atypical cases.

### Case Series:

#### Case 1:

A 65-year-old male with a history of poorly controlled type 2 DM presented with a non-healing ulcer on the 1<sup>st</sup> webspace of his left foot. Initially diagnosed as a DFU, debridement & wound care was initiated. Despite treatment, the ulcer failed to heal, prompting further investigation. Biopsy revealed malignant transformation of a viral wart infiltrating the underlying tissue, necessitating aggressive surgical amputation and adjuvant therapy.

#### Case 2:

A 60-year-old female with a underlying type II DM presented with a non-healing ulcer over the plantar aspect of her left foot. Despite compliance with diabetic management and wound care, the ulcer persisted, resulting in amputations. However, no resolution was achieved prompting concern for malignancy. Histopathological examination confirmed SCC, prompting surgical excision and amputation to prevent further progression and metastasis.

### Case Discussion:

The diagnostic challenge in these cases stems from the overlap in clinical presentation between DFUs and malignancies such as SCC, compounded by factors such as underlying diabetes mellitus. Patients with diabetes have impaired wound healing and increased susceptibility to infections, thereby masking the underlying malignancy. Additionally, the

chronicity of DFUs may desensitise clinicians to consider alternative diagnoses, delaying the identification of malignancies. Pitfalls in detecting cases early include misattribution of symptoms, delayed biopsy, inadequate imaging in a high load tertiary centre. We tend to only think of malignancies after about 1.5-2 years later.

In cases where malignancies of the foot are diagnosed late and has progressed significantly, leading to extensive tissue involvement and potential complications, amputation may be necessary as part of the treatment plan. The choice of amputation level depends on various factors, including the extent of the tumor, presence of metastasis, patient's overall health status, functional goals, and quality of life considerations.

### Conclusion:

These cases underscore the importance of maintaining a high index of suspicion for malignancy in patients presenting with atypical DFUs, especially in the setting of longstanding diabetes mellitus. Early recognition and biopsy of suspicious lesions are crucial to prevent diagnostic delays and facilitate timely intervention, ultimately improving patient outcomes. Enhanced interdisciplinary collaboration between foot & ankle surgeons, endocrinologists, and oncologists is essential for comprehensive management and surveillance of patients with diabetic foot complications.

### References:

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