Invasive Squamous Cell Carcinoma

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Statement of Purpose

Squamous Cell Carcinoma (SCC) is a common disease of cutaneous tissue possessing a great ability to form metastasis. SCC is a malignancy which is often under recognized by the Podiatric Physician, due to a rare occurrence in the foot and ankle. This case presentation will increase the recognition of the important clinical features of this infrequently seen skin lesion.

Introduction

Although squamous cell carcinoma (SCC) is a common disease of cutaneous tissue that has a great ability to form metastasis, it has a rare occurrence in the foot and ankle. SCC is most commonly found on sun-damaged skin in male Caucasians in the fifth to seventh decades of life, frequently in the setting of chronic non-healing ulcers.

SCC is a malignancy that can be isolated to local tissues, spread to lymph nodes, or metastasize to distant sites. The cause of SCC is often under recognized and foot and ankle physicians should have high suspicion in any chronic non-healing ulcer.

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A typical scenario of SCC in the lower extremity is a chronic, painful, draining ulceration of more than twelve months duration with radiographic findings of osteolysis. Foot and ankle physicians should have a high suspicion for squamous cell carcinoma in chronic non-healing lesions, as there have been case reports in the foot and ankle. SCC is most commonly found on sun-damaged skin in male Caucasians in the fifth to seventh decades of life, frequently in the setting of chronic non-healing ulcers.

Bioptical and pathological evaluation of these chronic, suspicious lesions is imperative for proper diagnosis. Treatment modalities include wide excision of the malignant neoplasm, amputation, or Mohs’ procedure to ensure complete removal.

Case Report

This case reports on a 58 year-old female with a history of basal cell carcinoma who presented with a painful left plantar foot nodule for approximately one year’s duration. The patient reports a gradual increase in lesion size since time of first observation.

Past medical history significant for: Basal Cell Carcinoma (BCC), Anorexia, Depression, Anxiety, and Migraine. On physical examination, pedal pulses were palpable, protective sensation was intact, and no neurological deficits were noted. No structural or muscular defects were observed.

Dermatologic examination revealed a 1.5 cm x 1.6 cm ill-defined nodular lesion overlying the area of the medial plantar arch. (Figure 1). Increased enhyema and scaly appearance were noted, along with tenderness to palpation. No lymphangitis, increased calor, or drainage from the lesion was present.

Data:

Lab Values:
- Basic Metabolic Panel – within normal limits
- CBC/wid differential – within normal limits

Radiographs:
- No soft tissue or osseous abnormalities were observed.

Fungal Culture:
- Skin scrapings – negative for the presence of Fungi.

Biopsy:
- Histological results – consistent with primary Squamous Cell Carcinoma, invasive – well differentiated type. (Figure 2).

Plan:

The patient underwent excisional biopsy, revealing well-differentiated, invasive squamous cell carcinoma.

After discussion of interventional options, the lesion was completely removed via micrographic Moh’s surgery.

Routine follow-up on an as needed basis.

Figure 1: Clinical photographs:
- Left lower extremity (upper left)
- Plantar left foot (above)
- Close-up of lesion prior to intervention (left).

Figure 2: Histological specimens showing well-differentiated, invasive squamous cell carcinoma.

Discussion

SCC is a malignancy that can be isolated to local tissues, spread to lymph nodes, or metastasize to distant sites. Biopsy and pathological evaluation of these chronic suspicious lesions is imperative for proper diagnosis. Although SCC is uncommon in the foot and ankle, the malignancy is often under recognized and foot and ankle physicians should have high suspicion in any chronic non-healing ulcer.

Treatments include wide excision of the malignant neoplasm, amputation, cryotherapy, or Moh’s procedure to ensure complete removal.

Acknowledgements

Trent Marburger MD, dermatopathology fellow, Cleveland Clinic Foundation, for providing histological slides and biopsy description.

The Northern Ohio Foot and Ankle Foundation, web: www.nofafoundation.org
E-mail: nofafoundation@gmail.com

References


Post-Operative Photographs:

1. Mercy Health
2. Podiatric Medicine and Surgery Resident, Mercy Health, Cleveland Ohio, NOFA Foundation Resident
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References