Squamous Cell Carcinoma in Long Standing Venous Ulceration

Ali Qadri, DPM[1]

1: Fellow - MedStar Georgetown University Hospital Foot & Ankle Research and Surgical Fellowship, Washington, DC

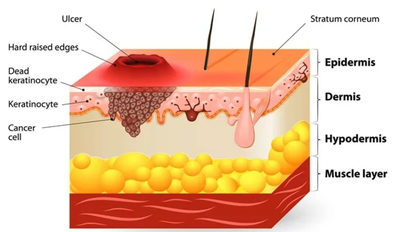
STATEMENT OF PURPOSE

Long standing venous ulcerations or ulcerations of the lower extremity can increase the chances of squamous cell carcinoma formation.

INTRODUCTION

Squamous cell carcinoma of the skin is the 2nd most common skin cancer, which is characterized by abnormal growth of squamous cells of the tissue. If caught early squamous cell carcinoma is treatable with modern medicine. Squamous cell carcinoma is most often linked to tissue damage often linked to sunlight exposure leading to blister formation. Blister formation or wound formation in general can lead to denaturing of tissue as well as mutation of the tissue present. A common etiology of long standing damage to the skin can be seen in a Marjolijn's ulcer of the lower extremity. A Marjolijn's ulcer can be mistaken for a common lesion to the lower extremity but will present as a chronic non-healing lesion. The purpose of this study is to assess if there is a correlation between long standing venous ulceration or ulceration of the lower extremity, and squamous cell carcinoma formation.

Squamous-cell carcinoma



CASE STUDY

A 79-year-old male with history of longstanding chronic venous stasis with ulceration presented due to pain in his legs. He had been receiving treatment but noted maggots in his left lower extremity. Imaging illustrated a ill-defined lucent lesion in the anterior aspect of the left Tibia with overlying soft tissue irregularity.

Bone Biopsy Results: Submitted as bone fragments, left lower leg, debridement: Squamous cell carcinoma, invading bone.

CASE STUDY

RESULTS

Bone biopsy of this lesion revealed SCC with no primary source found. Patient underwent radiation therapy with no response ultimately undergoing a below-knee amputation.

CONCLUSION

Not many cases of SCC in the Tibia with no primary source exist. Treatment was complicated due to age and comorbidities. Treatment was deferred to the Oncology team with Palliative care on board as a treatment option was to let the cancer take its course. A true interdisciplinary approach/good support system for the patient was key. Whether to biopsy a wound/underlying bone and when to biopsy often differs by clinician. An algorithm is needed in order to timely manage lesions that may be suspicious for malignancy in the lower extremities.

REFERENCES

BALDURSSON B, SIGURGEIRSSON B, LINDELOF B. Venous leg ulcers and squamous cell carcinoma a large-scale epidemiological study. *British Journal of Dermatology*. 1995;133(4):571-574. doi:10.1111/j.1365-2133.1995.tb02707.x

Cavaliere R, Mercado DM, Mani M. Squamous cell carcinoma from Marjolin's ulcer of the foot in a diabetic patient: Case study. *The Journal of Foot and Ankle Surgery*. 2018;57(4):838-843. doi:10.1053/j.jfas.2017.11.016

LM C, M C. Squamous cell carcinoma developed on neglected, mistreated and delayed diagnosed chronic venous leg ulcer. *Archives of Surgery and Clinical Research*. 2019;3(1):016-021. doi:10.29328/journal.ascr.1001026

Publishing L. Cutaneous cancers and chronic leg ulcers - servier. Phlebolymphology. https://www.phlebolymphology.org/cutaneous-cancers-and-chronic-leg-ulcers/. Published August 20, 2014. Accessed August 30, 2022.

Stanford R, Lowell D, Raju R, Arya S. Marjolin's ulcer of the leg secondary to nonhealing chronic venous stasis ulcer. *The Journal of Foot and Ankle Surgery*. 2012;51(4):475-478. doi:10.1053/j.jfas.2011.10.002

Sîrbi AG, Florea M, Pătraşcu V, et al. Squamous cell carcinoma developed on chronic venous leg ulcer. *Rom J Morphol Embryol*. 2015;56(1):309-313.