

## Melanoma associated with chronic leg ulcer: Case report.

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### Abstract

**It has been stated that changes in skin coloration may accompany inflammatory reaction. In this context, the purpose of this case report is to present a patient of the Igbo ethnic group in South-Eastern Nigeria with reference to his developing malignant melanoma in a long standing leg ulcer. Hitherto, the association had been mainly that of squamous carcinoma. As for prevention, research in developed countries must show the way. Meanwhile, simple ulcer management and health education are indicated.**

**Keywords:** Skin ulcer, Leg ulcer, Melanoma research, Health education.

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### Introduction

From France, Prunieras [1] was emphatic thus: "Changes in skin coloration frequently accompany inflammatory reactions, either chronic or acute". As he continued, "the relationship between inflammation and pigmentation is a solid fact." Also a solid fact is the association between chronic ulcers and squamous carcinomas [2,3]. Indeed, our local experience is on record [4,5]. However, we present the most unusual development of melanoma in chronic leg ulcer of a Nigerian man of the Igbo ethnic group [6].

### Case Report

EJ, a 65-year-old man of the Igbo ethnic group consulted one of us (FA) for a chronic right leg ulcer of 20 years duration. The antecedent history was that of trauma. The ulcer showed sloping edges, fibrotic base and granulating floor. At operation, a black deposit was apparent in a portion of the ulcer. Therefore, melanotic deposition needed to be confirmed.

The specimen was submitted to the co-author (WO). It showed ulcerated skin and a thicker 4 cm piece with an inky black patch in its mid-portion towards the inner biopsy edge. Microscopy revealed skin with underlying scar tissue in the midst of which was dense collections of pleomorphic pigmented cells. Special staining showed up melanin deposition with associated chronic cell infiltration. Therefore, melanoma was diagnosed.

### Discussion

It has been stated that molecular and genetic diversity occurs in the metastatic process of the melanoma [7]. Accordingly, both the present status and the future prospects for adjuvant therapy of this cancer were discussed [8]. One South African series showed lymphocytic infiltration, either within the tumor or at the edge [9].

Such special infiltration was absent in this case. Emerging data from USA group were suggestive of the need for biologic and

genetic studies [10], which believe that the group stated, that the "melanoma in pigmented skin may represent molecular distinct cancers." This was entertained by another group [11]. Primary lesions preponderate in the foot not only in the African-American blacks [12] but also in Nigerians [13].

This trend is a contrast to the uniqueness of our patient whose site of origin was the leg! According to the associates of Mahendraraj [12], cutaneous malignant melanoma occurs most commonly in the sixth and seventh decade of life. This is true of our patient. As to the future, it was perceived by Berwick's group [13], stating that "The epidemiology of melanoma is complex, and individual risk depends on sun exposure, host factors, and genetic factors, and in their interactions as well".

As they continued "Prevention of melanoma has been attempted using various strategies on specific subpopulations, but to date optimal interventions to reduce incidence have not emerged". Of course, in our developing community, we must look to the future with regard to the results coming from the developed countries. In conclusion, not only health education but also adequate prompt ulcer management is essential.

### References

1. Frunieras M. Melanocytes, melanogenesis, and inflammation. *Intl J Dermatol.* 1986;25:624-8.
2. Adegbehingbe O, Oginni L, Olabanji J, et al. Chronic leg ulcer presenting through emergency surgical unit. *The Internet J Surg.* 2006;9.
3. Baldursson B, Sigurgeirsson B, Lindelof B. Leg ulcers and squamous cell carcinoma. *Acta Derm Venereol.* 1993;73:171-4.
4. Reich-Schupke S, Doerler M, Wollina U, et al. Squamous cell carcinomas in chronic venous leg ulcers. Data of the German Marjolin registry and review. *J Dtsch Dermatol Ges.* 2015;13:1006-13.
5. Onuigbo WIB, Onah I, Olaitan P, et al. Marjolin's ulcer at a Nigerian hospital (1993-2003). *J Plast Reconstruct Aesth Surg.* 2006;59:565-6.

6. Basden, GT. Niger Ibos. Cass, London 1966.
7. Harbst K, Lauss M, Cirenajwis H, et al. Molecular and genetic diversity in the metastatic process of melanoma. *J Pathol.* 2014;23:39-50.
8. Moschos SJ, Kirkwood JM, Konstantinopoulos PA. Present status and future prospects for adjuvant therapy of melanoma: Time to build upon the foundation of high-dose interferon alfa-2b. *J Clin Oncol.* 2004;22:11-4.
9. Rippey JJ, Rippey E, Giraud RM. Pathology of malignant melanoma of the skin in black Africans. *South Afr Med J.* 1975;49:789-92.
10. Kabigting FD, Nelson FP, Kauffman CL, et al. Malignant melanoma in African-Americans. *Dermatol Online J.* 2009;15:3.
11. Reintgen DS, McCarty Jr KM, Cox E, et al. Malignant melanoma in black American and white American populations: A comparative review. *JAMA.* 1982;248:1856-9.
12. Mahendraraj K, Sidhu K, Lau CSM, et al. Malignant melanoma in African Americans. *Medicine (Baltimore).* 2017;96:e6258.
13. Berwick M, Buller DB, Cust A, et al. Melanoma epidemiology and prevention. *Cancer Treat Res.* 2016;167:17-49.

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