SciMedCentral

Journal of Dermatology and Clinical Research

Short Communication

Squamous Cell Carcinoma of the Face in Black Skin: A Serie of 27 Cases in the Dermatology Department of Aristide Le Dantec Teaching Hospital

Diadie S[1]*, Ndiaye M[1], Diop K[1], Ndiaye MT[2], Deh A[1], Ndour Niar[1], Diatta BA[1], Diallo M[1], Ly F[2] and Niang SO[1]

[1]Department of Dermatology, Aristide Le Dantec University Hospital, Senegal

[2]Dermatology Hygien and Social institute, Senegal

*Corresponding author

Saer Diadie, Department of Dermatology, Aristide Le Dantec University Hospital, Senegal, Tel: 00221776163969; Email: diadie_saer@yahoo.fr

Submitted: 05 March 2021

Accepted: 24 March 2021

Published: 26 March 2021

ISSN: 2373-9371

Keywords

- Squamous cell carcinoma
- Face
- Black skin

Abstract

Background: In black-skinned patients, cutaneous squamous cell carcinoma (SCC) occur mainly in the lower limbs, a site with minimal sun exposure. The particularities of the involvement of these tumors on the face, highly attempt by sun radiation are unknowed

Objectives: To identify the epidemiological and anatomo-clinical profile of squamous cell carcinomas of the face in patienst with black skin.

Methods: We conducted a retrospective study (from January 1996 to October 2016) of patients with a cutaneous SCC followed in the dermatology department of Aristide Le Dantec Teaching Hospital. Among them, we identified the epidemiological and anatomo-clinical features of the face localization. The data were pooled through Sphinx software and processed by epi-info 7.2.

Results: One hundred and twenty-two patients (n=122), 16 men and 11 women, with cutaneous SCC were enrolled. Face involvement corresponding to our sample represented 21.3% (27 cases), accounting for 54% of all cancers of this topography. The mean age of patients was 52 years.

The tumor was located on the cheek in 37% (n=10), on the lower lip in 37% (n=10), and on the ears and the eyelids in 11.1% (n=3) each. The nose and the upper lip were involved in 7.4% (n=2) respectively. Pre-existing dermatosis was reported in 14 patients. We noted 7 genodermatoses and 7 acquired dermatoses.

Conclusion: In dark-skinned patients, squamous cell carcinoma remains the most common facial skin cancer and mainly occurs on the lower lip and cheeks.

INTRODUCTION

In light-skinned people the face is the most common skin cancer site with basal cell carcinoma being the most frequent type [1]. In black-skinned individuals, these neoplasias occur in the lower limbs and are mainly represented by squamous cell carcinoma (SCC) [2,3]. The occurrence of SCC in this anatomical region, which is fairly well protected from ultraviolet (UV) radiations, is therefore paradoxical given the impact of the sun on the occurrence of squamous cell carcinoma of the skin.

It's against this backdrop that we thought it would be necessary to identify the prevalence and the anatomo-clinical particularities of squamous cell carcinomas of the face in a black-skinned population.

OBJECTIVES

The objective of this work was to determine the epidemiological and topographical aspects of facial SCC in a black-skinned population.

PATIENTS AND METHODS

We conducted a retrospective study (from January 1996 to October 2016) to analyze the medical records of all the patients followed in the dermatology department of Aristide Le Dantec Teaching Hospital for skin cancer. Among them, we first studied all the malignant tumours of the face before identifying the epidemiological and topographical patterns of squamous cell carcinomas of the face. The data were collected through the Sphinx software and processed by epi-info 7.2.

RESULTS

Overall, we recorded 253 cases of skin cancer. Face involvements (49 cases) represented 19%, of which tumors were distributed as follows: squamous cell carcinoma in 27 cases (54.2%), lymphoma in 9 cases (18.75%), basal cell carcinoma in 7 cases (4.6%), Darrier Ferrand dermotofibrosarcoma in 2 cases (4.2%) Rhabdomyosarcoma, adnexal carcinoma, melanoma and angiosarcoma were observed in 1 case (2%) each (Figure 1).

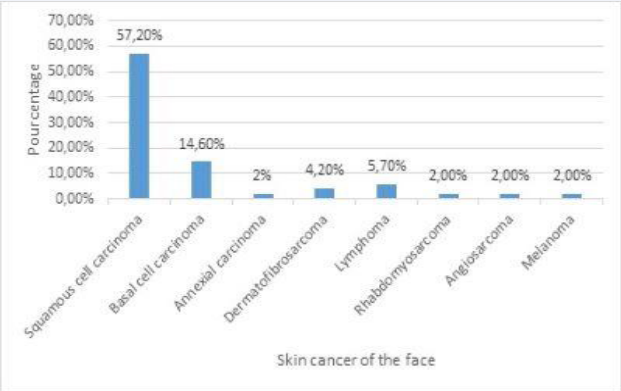

Figure 1 Distribution of skin cancer on the face.

Figure 3 Eyelid SCC on a child during xeroderma pigmentosum.

During the study period, 122 cases of squamous cell carcinoma of the skin were observed. Those involving the face and matching our sample accounted for 21.3% (27 cases). The mean age of the patients was 52 years with extremes range from 4 years to 90 years. They were 16 men and 11 women.

Considering the topographical pattern, squamous cell carcinomas involved the cheek in 37% (n=10), the lower lip in 37% (n=10), the ears and eyelids in 11.1% (n=3) each. The nose and the upper lip were affected in 7.4% (n=2) respectively (Figure 2).

An underlying dermatosis condition was reported in 14 patients, including 7 genodermatoses and 7 acquired dermatoses. The genodermatoses consisted of 2 cases of albinism, 3 cases of epidermal verrucciforme dysplasia and 2 cases of xeroderma pigmentosum (Figure 3). Acquired dermatoses were represented by actinic cheilitis in 4 cases, leukoplakia lesions of the oral mucosa (prosthesis and mucosal lichen planus) in 2 cases and exogenous pseudo-ochronosis linked to chronic artificial bleaching by hydroquinone in 1 case.

The squamous cell carcinoma was multifocal in 6 cases, all of which had pre-existing dermatosis.

DISCUSSION

The study of 253 medical records of skin cancers in the black skin allowed to note that the face is not the favorite site of SCC, which nevertheless remains the first neoplasia. This carcinoma is particular because of its early onset and its delayed diagnosis.

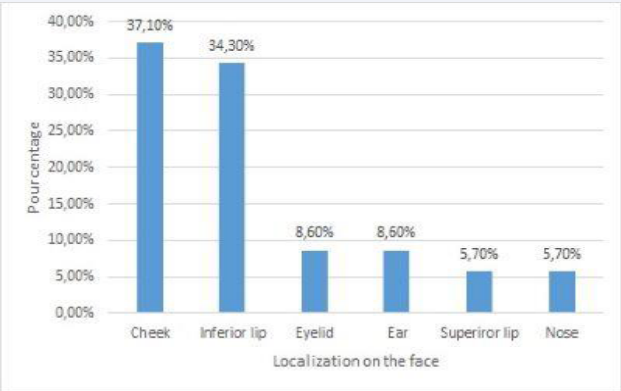

Figure 2 Location of SCC on the face.

These results do not match with most European studies where basal cell carcinoma remains by far the most common facial cancer [1,4,5]. It accounts for about 2/3 of all skin cancers [6]. Its incidence ranges from 1/100,000 in black African populations to more than 1500/100,000 in the light-skinned populations of equatorial Australia [7]. In these countries, a white-skinned child runs a lifetime risk of developing a basal cell carcinoma by 20 to 30% with a favorite face seat, whereas the risk is 10% for squamous cell carcinoma [8,9].

Although it is the first facial cancer in black-skinned individuals, cutaneous SCC is electively found on the lower limbs in populations from sub-Saharan region. Previous studies outlined a sharp predominance of this location [2,3]. This would be related to the frequency of certain underlying dermatosis condition, notably warty lichen, chronic ulcers and a probable involvement of the HPV virus in the degeneration of these pre-existing dermatoses. Indeed, the role of HPV, endemic in Africa, has recently been identified as a factor promoting the occurrence of cutaneous SCC ($p < 0.0001$) [10].

The mean age of occurence of SCC in our patients, 52 years, is lower than in the white population. In Croatia, the mean age of patients with facial cancer is 72 years, whereas in France it is 67years [5,11]. In these countries, the most frequent skin cancers are those for which the role of UV radiations is no longer in doubt [5,12,13]. These same malignant tumours are also more frequent in our series. However, it is paradoxical to note an earlier onset of these cancers in our patients, who would be better protected against UV radiations due to the high skin melanin content. Nevertheless, the small sample size of our study may be a recruitment bias and explain this on the one hand. On the other hand, this may be related to a higher prevalence of precancerous dermatoses with a delay in treatment due to the scarcity of dermatologists in Senegal, where the ratio is one dermatologist per 300,000 inhabitants. Furthermore, these specialists essentially work in the capital city, which is the cause of the delay in adequate care and an evolution towards degeneration. In continuum, these patients with cancer lately come on consultation exposing them to metastasis or amputation. This is

the case of one of our patients who presented with a significant loss of substance of the lower lip baring the internal structures (Figure 2).

Ultimately, this age difference could merely be related to the youthfulness of the Senegalese population, where the mean age is 22.7 years [14], whereas it is 41.7 years in some European countries [15].

The lower lip and the cheeks are the main locations of the facial SCC in our series. This does not raise any particularity compared to the white-skinned population [16].

CONCLUSION

The face is not the favorite seat SCCs on black population. The cheeks and the lower lip represent the main locations of these tumors.

REFERENCES

1. Hafner J, Kempf W, Hess Schmid M. Tumeurs Cutanées Epithéliales. Med. Suisse. 2002; 1: 15.
2. Bang KM, Halder RM, White JE, Sampson CC, Wilson J. Skin Cancer In Black Americans : A Review Of 126 Cases. J National Med Assoc. 1987; 79: 51-58.
3. Dieng MT, Diop NN, Déme A, Kouamé Alexandre Kouassi, Yao Isidore Kouassi, Ange-Sylvain Allou, Mamadou Kalogaa. Ann Dermatol Venereol. Carcinome Epidermoïde Sur Peau Noire : 80 Cas. 2004; 131: 1055-1057.
4. Miller Dl, Weinstock Ma. Non Melanoma Skin Cancer in the United States: Incidence. J Am Acad Dermatol 1994; 30 : 774-778.
5. Grange. F. Épidémiologie Des Cancers Cutanés En France Ann Dermatol Et De Veneréo. 2005; 132: 6-7.
6. Silverberg E, Boring Cc, Squires Ts. Cancer Statistics 1990. Ca Cancer J Clin 1990; 40: 9-26.
7. Grosshan E Carcinome Basocellulaire Encycl Méd Chir, Dermatologie. 1999 ; 98-620-A-10
8. Kaldor J, Shugg D, Young B, Dwyer T, Wang YG. Non-Melanoma Skin Cancer: Ten Years Of Cancer-Registry-Based Surveillance Z Int. J. Cancer: 1993; 53: 886-891.
9. Miller Dl, Weinstock Ma. Non Melanoma Skin Cancer in the United States: Incidence. J Am Acad Der. 1994; 30: 774-778.
10. Wang J, Aldabagh B, Justin Yu, Sarah TA. Role of Human Papillomavirus In Cutaneous Cell Carcinoma: A Meta-Analys. J Am Acad Dermatol. 2014 ; 70 : 621-629.
11. Orkic Z, Puntaric D, Puntaric E, Puntaric I, Vidosavljević D, Gvozdić V,. Characteristics and Incidence Of Head And Neck Skin Malignant Neoplasms In The Population Of The Osijek-Baranya County 2004-2012. Acta Med Croatica. 2015; 69: 15-24.
12. Diepgen TL, Mahler V. The Epidemiology of Skin Cancer. Br J Dermatol. 2002; 146: 1-6.
13. Coroi Mc, Rosca E, Mutiu G, Coroi T. Eyelid Tumors: Histopathological And Clinical Study Performed In County Hos-Pital Of Oradea Between 2000-2007. Rom J Morphol Embryol 2010; 51: 111-115.
14. Https://Www.Insee.Fr/Fr/Statistiques/2381476 Consulté Le 10 Février 2019 À 12h
15. Www.Ansd.Sn/Ressources/Ses/Chapitres/1-Demographie-Sesn2013.Pdf Consulté Le 10 Février À 12h 15'
16. Buettner Pg, Raasch Ba. Incidence Rates of Skin Cancer in Townsville, Australia. Int J Cancer. 1998; 78: 587-593.

Cite this article

Diadie S, Ndiaye M, Diop K, Ndiaye MT, Deh A, et al. (2021) Squamous Cell Carcinoma of the Face in Black Skin: A Serie of 27 Cases in the Dermatology Department of Aristide Le Dantec Teaching Hospital. J Dermatolog Clin Res 9(1): 1140.