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# CASE REPORT OF A PATIENT OF BLACK ETHNIAN WITH SKIN CANCER IN A HOSPITAL DOWNTOWN IN SÃO PAULO

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All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0). Abstract: Introduction: skin types and non-melanoma are basal cell carcinoma and squamous cell carcinoma, being more common in people over 40 years old and rare in black children, with radiation exposure being the main risk factor. Case report: N.A., 80 years old, male, black, with a history of sun exposure for 35 years, with the appearance of a small indulation on the back of the right hand for 5 years. He underwent an excisional biopsy that found classic squamous cell carcinoma, pT2 pNxpMx staging, with good evolution. Conclusion: Although skin cancer in the black population is uncommon, it is a diagnosis that needs to be suspected and the prevention of this pathology is necessary for this population. In addition, further studies are needed to better understand this pathology in this ethnic group.

**Keywords:** Skin; black; neoplasm; tumor; malignancy.

#### INTRODUCTION

Skin cancer is characterized by the abnormal and uncontrolled growth of the cells that make up the skin. These cells are arranged in layers and, depending on the affected layer, the classification of different types of skin cancer is observed <sup>(47)</sup>. There are two types of skin cancer and non-melanoma: basal cell carcinoma (BCC), which arises in the basal cells, with low lethality and appears more frequently in regions exposed to the sun, and squamous cell carcinoma (SCC), which manifests in squamous cells and can develop in all parts of the body, although it is more common in areas exposed to them, such as BCC (13, 47). In Brazil, these data confirm, as the National Cancer Institute (INCA) records that the non-melanoma type corresponds to 30% of all malignant tumors registered in the country, of which 70% are BCC and 25% are SCC (32).

Among skin tumors, the non-melanoma type has the highest incidence and lowest mortality, both in men and women, being more common in people over 40 years of age and black children, with the exception of those with previous skin diseases <sup>(6, 18, 36, 47)</sup>.

The data collected by the National Skin Cancer Prevention Campaign showed that of the 3,792 diagnosed cases of skin cancer, 79.82% were white and only 1.37% were black (46). Reinforcing these data, Hospital Ipiranga reported that the white race was responsible for 35.2% of non-melanoma skin cancer diagnoses, as well as at Hospital do Câncer Dr. José Figueiredo <sup>(8, 45)</sup>.

It is known that the habit of exposing oneself to the sun for aesthetic purposes or for occupational exposure contributed to the expansion of this disease in the last forty years. Several studies show that the most important risk factor associated with the etiology of these tumors is sun exposure, whose action is more aggressive in light-skinned individuals, with UV-Ba radiation being more harmful and mainly responsible for the carcinogenic effect. <sup>(3, 4, 5, 18, 43)</sup>.

Epidemiological studies on the white skin population residing in tropical countries indicate that in these regions, this population has higher levels of occurrence of skin cancer, as in Australia, the country with the highest incidence of skin cancer in the world (40). It is also observed that the most frequent areas of skin exposure to the sun are more susceptible to these tumors, with this the most affected regions are the head and neck, followed by the extremities, which are places with the highest risk of recurrence for basal and squamous cell carcinomas and that deserve consideration for surgical treatment <sup>(23, 33, 44)</sup>.

On the other hand, melanin plays an important role in protecting the skin against ultraviolet radiation, and its levels are inversely correlated with the intensity of radiationinduced DNA damage in the human skin in different ethnic groups. <sup>(3, 18, 24, 51)</sup>.

Due to the photoprotection promoted by the more pigmented melanin in the skin, skin cancers are less frequent in black patients, although this population more frequently dispenses with the use of sunscreens and reports less occurrence of sunburns. (3, 18). But despite the lower risk of this population, black patients who develop skin cancer are faced with increased morbidity and mortality, as they present with different characteristics from the white population. (2, 3, 13, 18, 50). In addition, mortality is higher when the lesion arises from an inflammatory process, being greater in spinal tumors, making the prognosis of SCC severe and reserved in black patients. (11, 28)

OCEC, the most common skin tumor in blacks, shows that, unlike white patients, ultraviolet radiation is not the most important retiological factor in the development of this cancer. As with white people, the most important risk factors for the development of these tumors are chronic scarring processes and areas with chronic inflammation. <sup>(19, 35, 37)</sup>.

The second most common skin tumor in blacks is BCC, and only 1.8% of these carcinomas occur in blacks (26). As with whites, it is mainly related to prolonged and intense exposure to ultraviolet light. Its diagnosis also clinical and histopathological, is with dermoscopy being a tool that can increase diagnostic accuracy and minimize unnecessary biopsies (13). The complications of BCC arise when there is a delay in the diagnosis, and may present with expansion of the locally aggressive tumor (49). Despite having a good prognosis in most of the world, in Nigeria, BCC is more aggressive in people with skin conditions (11, 29).

Malignant skin lesions are usually limited to a discrete area and occur in the form of hard papules or plaques. Lesions are scaly, irregular, verrucous with an erythematous base and, as they progress, may become ulcerated and present with raised edges, usually with a rough surface <sup>(44, 51)</sup>. The patient describes the lesions as sore, itchy, or painful that do not heal and bleed when minor trauma occurs <sup>(47, 35, 30)</sup>.

The special problem of black skin cancer is early on in medical training where dark pigmentation is believed to be protective against skin cancer. This low index of suspicion, together with the failure of physicians to examine the whole body skin during routine examination, increases the likelihood that a cutaneous malignancy will go undiagnosed or be diagnosed late in this group (2, 9, 12, 39). Differences in survival rates also result from less access to medical care by this population, making it difficult to perceive early signs of preventive screening because of socio-economic and cultural factors (2, 9, 11, 12). In Brazil, there is a large number of people with skin conditions, so it is necessary for professionals to become familiar with the clinical differences that skin cancer can present in more pigmented skin <sup>(12)</sup>. There is evidence of a tendency towards increased morbidity and mortality from skin cancer, making it a public health problem, but with the possibility of control through primary prevention, with protection of the skin against excessive exposure to secondary sunlight, when performing early diagnosis and treatment at an opportune moment<sup>(5)</sup>., for adequate treatment and prevention of complications, so that the complete removal of the tumor can be carried out, and a careful postoperative follow-up is carried out to detect early treatment of relapses(15).

Treatment of skin cancers includes curettage (CTG), electrocautery (ECG), excisional surgery, surgery Mohs micrograph, administration of 5-fluoracil, radiotherapy, photodynamic therapy, and cryosurgery. However, the treatment considered standard is tumor excision with safety margins of at least 0.5 cm. The clinical aspects to be considered in the treatment is the assessment of the possibility of metastasis or recurrence. When there is a tendency for metastases to occur, the approach involves the excision of satellite nodes and research for metastases involving other organs (2, 3, 8, 32).

In cases of small and well-delimited tumors, CTG with ECG, cryosurgery or simple excision are indicated (1). In cases of well-differentiated tumors, smaller than 2 cm in diameter, simple excision with margins of 4 mm is more indicated. For tumors larger than 2 cm in diameter or located in areas of greatest risk of recurrence, Mohs micrographic surgery or excision with safety margins of 6 mm are indicated as the first option <sup>(1, 7)</sup>. In patients without clinical conditions to undergo surgical procedures, cryosurgery or radiotherapy are indicated, as they do not require a surgical environment for their performance <sup>(42)</sup>. However, although it is useful and well indicated, especially for recurrent or aggressive tumors, it has a high cost and limitations when the invasion pattern presents non-contiguous foci of neoplasm (34).

Among other treatment options, the application of 5-fluorouracil is indicated for very superficial lesions, with high failure rates <sup>(34)</sup>. Cryosurgery with liquid nitrogen is good for small tumors, as well as electrodissection and curettage <sup>(21, 27)</sup>. Despite the various treatments for skin cancer, it cannot be ignored that reconstruction after surgical excision is an essential step for recovery. Defects can be corrected with local flaps or grafts <sup>(10)</sup>.

Lymphatic metastases are known to be the most common in cases of skin tumors, and the first two years after treatment of the primary tumor represents the period of greatest risk for metastases, with distant metastases being less frequent than locoregional metástases <sup>(31, 42)</sup>. The main factors that determine the risk of recurrence of recurrences and metastases are related to the anatomical, histological and molecular aspects of the tumor <sup>(4)</sup>. The location of the tumor has the ability to affect the prognosis and may lead to a worse outcome, as well as the size and histology <sup>(26, 38, 40, 42)</sup>. The histological factors that interfere in the prognosis are: the size of the tumor, the degree of histological differentiation of the tumor, the histological subtypes and perineural invasion, which is associated with a higher risk of lymphatic metastases, mortality, and local recurrence <sup>(17, 20, 26, 38, 41)</sup>.

Careful postoperative sleep monitoring is important due to the high chance of developing a new SCC or other skin tumor <sup>(16)</sup>. Therefore, monitoring is suggested quarterly in the first year, every six months until completing five years, and annually thereafter, to detect recurrence, metastases, or the emergence of a new histological type of tumor. The early identification and treatment of recurrence increases the survival of patients, a fact that reinforces the importance of guiding the patient to perform skin self-examination <sup>(48)</sup>.

Although SCC is not a rare condition, the importance of its diagnosis and treatment is still greatly underestimated, both by physicians and patients. That is why it is important to reinforce the guidelines on the risks for its development, given that due to the lack of guidelines and the difficulty of access to health services, the diagnosis and treatment often ends up being late, when the tumor is already advanced, as this tumor evolves with metastases and deformations, requiring complex treatment that does not always offer the cure or the best aesthetic solution<sup>(14)</sup>.

## CASE REPORT

N.A., 80 years old, male, black ethnicity, born in Ibaté-SP, resident in Araraquara-SP, residing in São Carlos-SP, Catholic, divorced, retired as a railway worker, father of 4 children. Negapathologies, use of medications and allergies. Made use of alcoholic beverages for 15 years smoking 25 years/pack. He worked 35 years exposed to sunlight without ever using sunscreen or adequate clothing to protect his skin.

The patient reports the emergence of a small indulation on the back of the right hand for 5 years, associated with mild pruritus, evolving to a vegetative characteristic (Figure 1). In 2016, he was referred for evaluation at the oncology outpatient clinic of São Carlos, being submitted to an excisional biopsy that found classic, moderately differentiated squamous cell carcinoma (G2), which invades up to the dermereticularis (CLARKIV), TNMpT2 pNxpMx staging. The macroscopic lesion was 35 x 15 mm, with no signs of angiolymphatic and perineural invasion, with free surgical margins. The incision evolved with good healing, without sensory or motor involvement, and without local complications (Figure 1).

### DISCUSSION

Understanding ethnicity as an isolated variable from its social and historical context may not reflect a public health issue that requires a broader view. Even today, access to health care is not the same for all social classes and the prevalence of the black population among the poor remains. Therefore, socioeconomic variables alone do not reflect all racial health disparities, in fact, health inequalities exist even when access to health is guaranteed. This report addresses the issue of public health involving patients with skin conditions, highlighting the importance of these patients being properly examined regardless of their social class or level of school orientation, thus reinforcing the social role of the physician in society. <sup>(39)</sup>.

Malignant skin tumors in the black population tend to present more severe behavior, however, there are not enough literary subsidies to say whether the greater severity is due to racial characteristics, if patients seek treatment at an advanced stage of the disease, or if there is a correlation between these variables. Another fact to consider is the belief that the skin is completely protected against cancer, creating conditions for malignant



Figure 1: Images of the right hand with the lesion, and of the same hand two years after surgery.

lesions to go unnoticed by the doctor at the time of the consultation. Therefore, variables involving the black population and skin lesions, especially malignant lesions, must be researched for a better understanding of these factors and better care for this population. <sup>(9, 12)</sup>.

When comparing the study carried out at Hospital Ipiranga, which showed a greater proportion of cases of BCC, the same was repeated at Dr. José Figueiredo Cancer Hospital<sup>(8,45)</sup>. These data demonstrate the importance of this case report, since the patient described here was a CEC carrier, and its occurrence is lower in any ethnicity. Another fact that reinforces the need for reporting and further work on patients of black skin is the low frequency of skin tumors in this population, since at Hospital Ipiranga the percentage of patients with skin tumors was 3.4% of the cases, and in the National Campaign for the Prevention of Skin Cancer, only 1.37% of patients of black skin with malign skin lesions were reported<sup>(8,46)</sup>.

Due to this, it is necessary to continue development investments for the of comprehensive actions for the control of skin cancer, especially with regard to the black population. The approach must cover different levels of activity, such as: health promotion, early detection, patient care, surveillance, training of health professionals, communication and social mobilization, research and management of the Unified Health System (SUS). Health education, both for professionals and the population in general, in order to raise awareness of the possibility of developing skin cancer in different scenarios and to enable the recognition of early changes suggestive of malignancy, is another internationally accepted strategy. In addition, it is necessary to continue studies for cases of recurrence of tumors, the occupational profile of affected

users, the perspectives of professionals in the oncology area, estimates of the incidence of tumors and awareness actions. <sup>(9, 12, 45)</sup>.

#### CONCLUSION

Access to health care is not the same for all social classes, even though the right to health care is universal, and the majority of the poor population is composed of black people. As a result of this inequality, it is not possible to state whether the greater severity of skin lesions in black patients is due to ethnic characteristics or whether patients seek or receive treatment at more advanced stages of the disease.

It is necessary for the black population to be advised to protect themselves from sun exposure, as well as to pay attention to changes in the skin and areas of chronic scars and chronic inflammation, seeking medical attention whenever necessary.

There are few academic studies concerning skin tumors in black patients, and despite the prevalence of the disease being higher in the white skin population, the repercussions found at the time of diagnosis in patients with skin lesions are more severe, so there is a need to produce work on this pathology in black patients.

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