

Epidemiological profile of tumor dermatoses in the hospital setting in Cotonou (Benin) from 2009 to 2018

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Abstract

Introduction: Tumoral dermatoses are tissue neof ormations due to an excessive, abnormal, anarchic and more or less autonomous cellular proliferation at the expense of the skin and its appendages. These tumoral dermatoses can be benign or malignant. They are responsible for a high morbi-mortality.

Patients and methods: Retrospective and descriptive cross-sectional study of the records of patients seen for mucocutaneous tumors, in the Dermatology-Venerology Department of the National Hospital and University Center Hubert Koutoukou Maga (NHUC-HKM) of Cotonou, from 2009 to 2018. Epidemiological data were collected from consultation registers and then entered and analyzed with Excel, EPI-DATA and SPSS software.

Results: A total of 10,627 new patients were registered, of which 885 cases of tumor dermatoses (8.32%). Thirty-five types of tumor dermatoses were collected. The average age was 31 years; the most represented age group was 20-39 years (46.30%). The sex ratio was 1.02. Lesions were acquired in 93.30% of patients. Benign tumors represented 94.80% of the patients. They were dominated by keloids (24.60%) followed by condylomas (16.20%), warts (10.40%), molluscum contagiosum (7.60%), cysts (6.50%) and the group formed by nevi and hamartomas (6.20%). Malignant tumors were rare and represented by carcinomas (basal and squamous cell) with 1.7% and melanoma (0.50%). Kaposi's disease was observed in 2.50%.

Conclusion: This study allowed us to know the frequency and the different types of tumoral dermatoses observed in the patients followed in the dermatology-venerology department of the NHUC-HKM of Cotonou during the last ten years.

Keywords : tumoral dermatoses; benign; malignant; Cotonou (Benin)

Introduction

Tumoral dermatoses are tissue neof ormations due to excessive, abnormal, anarchic and more or less autonomous cell proliferation at the expense of the skin and or its appendages ; they can spread at a distance with a high rate of morbidity and mortality that varies according to the cell types and their localization. Thus, each cell type contained in the different tissues of the skin is capable of transforming into benign or malignant tumors that can be acquired, hereditary or dysembryoplastic [1]. There is therefore a large number of skin tumors, the most frequent of which are benign.

Few studies have been done on this group of dermatoses in our country. The objective of the present study is to list all the tumoral dermatoses seen

in a Dermatology-Venerology department in Benin and to specify the socio-demographic characteristics of these patients who suffer from them.

Patients and methods

This was a retrospective and descriptive cross-sectional study that included all records of new patients with at least one cutaneous or mucosal tumor seen in the Dermatology-Venerology Department of the National Hospital and University Center Hubert Koutoukou Maga (NHUC-HKM) in Cotonou over a ten-year period (from January 1st, 2009 to December 31st, 2018). In a first step, the consultation registers were consulted and the patients with a diagnosis of tumor dermatoses were identified. In a second step, each file was studied and the epidemiological data were

collected on a survey form then entered and analyzed with Excel, EPI-DATA and SPSS software. The anonymity of the patients was respected.

Results

During the study period, 10,627 new patients with 885 cases of tumor dermatoses were identified, representing a hospital frequency of 8.32%. The same patient could have one or more different types of tumor dermatoses (**Table I**). A total of 948 tumor dermatoses were identified, grouped into 35 types.

Number of tumor dermatoses in the same patient	No. of cases	Percentage (%)
1	829	93.67
2	49	5.53
3	7	0.8
Total	885	100

Table I : distribution of 885 patients with tumor dermatoses in the Dermatology-Venerology Department of the NHUC-HKM of Cotonou from January 1st, 2009 to December 31st, 2018, according to the number of tumor dermatoses in the same patient

The mean age was 31.17 ± 17.43 years; with extremes from 01 day to 92 years. The largest number of cases was in the 20-39 year age group (46.3%).

The sex ratio was 1.02. The majority of cases of skin tumors (30.50%) were observed in learners (schoolchildren-students).

The lesions were congenital in 6.70% of patients and acquired in 93.30%. Among the latter, the time to consultation ranged from 01 day to 62 years. Benign tumors represented 94.80% of all tumors identified and malignant tumors and tumors of limited malignancy 5.20%.

Table II shows the distribution according to the different types of tumors identified.

Tumor dermatoses	No. of cases	Percentage (%)
Benign tumors		
Keloids	233	24.5
Condylomata	154	16.2
Warts	101	10.6
Molluscum contagiosum	72	7.6
Nevi and hamartomas	59	6.2
Sebaceous cysts and sebocystomatosis	40	4.2
Molluscum pendulum	35	3.7
Botriomycomas	32	3.4
Angiomas	30	3.2
Cutaneous fibroids	24	2.5
Other cysts	22	2.3
Lipomas	22	2.3
Recklinghausen's disease	19	2.0
Syringomas	17	1.8
Other neurofibromatoses	8	0.8
Dermatosis papulosa nigra	6	0.6
Mixed tumors with vascular components	5	0.5
Horns	3	0.3
Xanthomas	3	0.3
Trichoepitheliomas	2	0.2
Epidermodysplasias verruciformis	2	0.2
Fungal mycetomas	2	0.2
Other benign tumors	7	1.7
Malignant and limited malignancy tumors		
Kaposi's disease	24	2.5
Squamous cell carcinoma	12	1.3
Melanoma	5	0.5
Basal cell carcinoma	3	0.3
Hidradenomas	2	0.2
Unspecified carcinoma	1	0.1
Dermatofibrosarcoma of Darier Ferrand	1	0.1
Histiofibrosarcoma	1	0.1
Cutaneous lymphoma	1	0.1
Total	948	100

Table II: distribution of the 948 tumor dermatoses recorded in patients followed in the Dermatology-Venerology Department of the NHUC-HKM of Cotonou from January 1st 2009 to December 31st 2018, according to the type of tumor

Discussion

The hospital incidence of tumor dermatoses in our study (8.32%) is higher than that found by B. Seck et al. [2] (2.2%) in Dakar, Senegal in 2013 in a 1-year retrospective study. However, their frequency is high in histopathology departments. Indeed, tumoral and pseudotumoral dermatoses represented 54.2% of skin pathologies seen in the pathological anatomy laboratory in Lomé, Togo according to Darre et al. [3]. It can be deduced from this that the latter are more frequently requested for pathological anatomy examination by dermatologists

because of the fear of malignant tumors in the presence of any tumoral dermatosis.

Tumor dermatoses are dominated by benign tumors (94.80%). These results are consistent with data from the African literature. Barro-Traoré et al. in Burkina Faso [4] found 96.5% benign tumors in a 5-year retrospective study. Ossoué et al. in Ivory Coast [5] found 83.49% benign tumors over a period of 5 years.

Keloids (**picture 1**) were the most common benign tumour, followed by condylomas and warts. Whereas for Barro-Traoré et al. benign tumors of infectious origin, particularly viral (51.7%), predominated.



Picture 1 : Trunk and right arm keloids (crab-leg appearance)

Malignant and limited malignancy tumors were poorly represented (5.20%). The same observation was made by Barro-Traoré et al. (3.5%) in Burkina Faso [4]. They represented 1% in the study by Seck et al. [2] in Dakar, Senegal. Pitché et al. found that skin cancers represented 7.91% of skin tumors encountered in dermatology in Lomé, Togo [6]. This proves that malignant tumor dermatoses are rare in sub-Saharan Africa. However, these figures are probably also underestimated by the fact that the skin, being at the crossroads of several medical disciplines, some malignant tumors are not necessarily seen in dermatology but rather in other specialty departments such as otorhinolaryngology and surgery.

Kaposi's disease (**picture 2**) was the most common malignancy (48%) followed by squamous cell carcinoma (30%) and basal cell carcinoma (**picture 3**). Melanoma came in third place (10%). The same result was obtained by Saka et al. in Togo [7] with respectively 46.2% of Kaposi's disease, 33.6% of carcinoma and 10.3% of melanoma. For Pitché et al. [6], malignant melanoma ranked fifth among skin cancers (4 cases out of 69). On the other hand, Barro-Traoré et al. [4] did not find any cases of melanoma.



Picture 2 : Kaposi's disease in a people living with the Human Immunodeficiency Virus (angiomatic nodules and infiltrated plaques of the thighs)



Picture 3 : Basal cell carcinoma of the right cheek in an albino (note the pearls on the edges of the lesion)

Conclusion

This study allowed us to know the hospital frequency and the different types of tumoral dermatoses observed in patients attended in the dermatology-venereology department of the NHUC-HKM of Cotonou over the last ten years. They are dominated by benign tumors with keloids at the top. The knowledge of these tumoral dermatoses allows on the one hand to ensure their prevention as much as possible and on the other hand to provide modern means of their curative management.

Conflict of interest: none

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