

## Original Articles

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# Analysis of the profile of patients and dermatoses treated in a dermatologic surgery public campaign: the importance of the dermatologist in public health

*Análise do perfil dos pacientes e das dermatoses abordadas em mutirão de cirurgia dermatológica: a importância do dermatologista na saúde pública*

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## ABSTRACT

**Introduction:** In the Brazilian public health system, the current demand for dermatological procedures is greater than the offer, resulting in a waiting list of patients bearing dermatoses to be treated surgically. Aimed at reducing that waiting list, a collective effort of surgical procedures was carried out in the tertiary public health service. The corresponding data on the patients and lesions is disclosed in the present study.

**Objective:** To assess the profile of the patients – and respective skin lesions – who are awaiting to undergo dermatological procedures.

**Methods:** A simple descriptive profile analysis of the patients, treated dermatoses and procedures performed was carried out.

**Results:** Thirty-one patients (aged between 21 and 95 years, mean = 63.7 years). Seventeen (54.83%) were women and 14 (45.17%) were men. Thirty-eight lesions were treated: 21 neoplastic (carcinomas and melanomas), 8 pre-neoplastic (actinic keratoses) and 9 non-neoplastic (nevi, keloid and neurofibroma).

**Conclusions:** The present article is relevant due to the fact it identifies cases and patients awaiting dermatological surgical procedures in the public health system. Based on it, a better planning of public health strategies in the dermatological field should be possible. Also, it highlights the importance of the dermatologist physician's action in the public health, diagnosing and treating pre-neoplastic and neoplastic lesions.

**Keywords:** dermatology; ambulatory health services; health centers; population studies in public health; public health; public health administration; neoplasms; melanoma; carcinoma; carcinoma, basal cell

## RESUMO

**Introdução:** A saúde pública no Brasil apresenta demanda de procedimentos dermatológicos superior à atual oferta, resultando em fila de espera de pacientes com dermatoses a abordar cirurgicamente. Foi realizado mutirão de procedimentos cirúrgicos em serviço terciário de atendimento público para reduzir essa fila, sendo os dados dos pacientes e suas lesões aqui apresentados.

**Objetivo:** Analisar o perfil dos pacientes que aguardam a realização de procedimentos dermatológicos bem como suas dermatoses.

**Métodos:** Realizou-se análise descritiva simples do perfil dos pacientes, de suas dermatoses abordadas e dos procedimentos realizados.

**Resultados:** Foram atendidos 31 pacientes com idade entre 21 e 95 anos (média de 63,7 anos), sendo 17 (54,83%) do sexo feminino e 14 (45,17%) do sexo masculino. Foram abordadas 38 lesões, sendo 21 neoplásicas (carcinomas e melanoma), oito pré-neoplásicas (queratoses actínicas) e nove não neoplásicas (nevos, quelóide e neurofibroma).

**Conclusões:** Este artigo torna-se relevante por identificar casos e pacientes que aguardam procedimentos cirúrgicos dermatológicos no serviço público. Com ele, estratégias de saúde pública na área dermatológica podem ser mais bem programadas, além de destacar a importante ação do dermatologista na saúde pública diagnosticando e tratando lesões pré-neoplásicas e neoplásicas.

**Palavras-chave:** dermatologia; hospitais de dermatologia sanitária de patologia tropical; administração em saúde pública; estudos populacionais em saúde pública; saúde pública; neoplasias epiteliais e glandulares; melanoma; carcinoma basocelular; carcinoma

## INTRODUCTION

Public health in Brazil offers a universal and free service to all inhabitants. However, the demand in the population surpasses the number of bookings offered by health systems in all three levels of complexity: primary, secondary and tertiary.<sup>1</sup>

In dermatology, aging of the population over the past years associated to a gradual increase in the incidence of cutaneous neoplasias, reinforces the higher demand for surgical procedures in the public health setting. Such factors lead to a known waiting list of patients, either for consultations with dermatologists or to undergo dermatologic surgical procedures.<sup>1-3</sup>

Skin cancer is the most frequent cancer in Brazil and corresponds to 30% of all malignancies recorded in the country. They are more common in persons older than 40 years and have high cure rates if detected early. Among skin tumors, non-melanoma type has the highest incidence and lowest mortality. It is estimated for 2016 a total of 175,760 new cases, 80,850 being in men and 94,910 in women.<sup>2-4</sup>

Currently, in the city of São Paulo, 16 thousand dermatology consultations are requested every month, with the suspicion of skin cancers. The consultation capacity in the city is of about 10 per month, generating a waiting line for consultations of 65 thousand cases, that wait on average for 6 months<sup>1</sup>, not always requiring immediate surgical attention.

In the attempt of reducing the waiting time for the patients with a diagnosis of skin cancer that are waiting for a surgical procedure, collective efforts are organized in one day with a high number of dermatological procedures. In August 2017, one was made in a tertiary hospital in the city of São Paulo. The patient's and their condition's profiles were identified in order to better characterize the waiting list aspects and improve the performance of public health in dermatology.

## METHODS

It is a cross-sectional descriptive study analyzing patients seen on a day of collective effort in August 2017 in a tertiary hospital in the city of São Paulo. All patients had been examined by dermatologists previously and had their lesions diagnosed clinically and/or histopathologically. They were on a waiting list for a surgical procedure. The first 31 patients on the surgical procedure waiting list of that particular hospital were invited by phone. More complex cases were not invited in this collective effort since they would require the participation of other specialties, non-outpatient operating theater and longer stay in the operatory and post-operative recovery rooms.

All cases were treated in an outpatient surgical center by two dermatologists and seven residents and interns in the dermatology program of the hospital, that took turns in three operating rooms (Figure 1). All patients signed a surgical consent form, were discharge straight after the end of the procedure and a post-operative follow-up for removal of sutures and dermatology consultation was scheduled. All patients progressed with no post-operative complications during follow-up.

## RESULTS

In total, 31 patients with ages from 21 to 95 years of age (mean of 63.7), being 21 (67.74%) older than 60 years were booked in; 17 (54.83%) were female and 14 (45.17%) male. These patients had 38 lesions to be treated, 21 one them being malignancies. These malignancies were 18 (47.36% of all lesions treated) basal cell carcinomas (BCC), two (5.26%) squamous cell carcinomas (SCC) and one (2.63%) malignant melanoma. Eight (21.05%) pre-cancerous lesions were also treated, all of them actinic keratosis (AK). Nine non-malignant lesions were also surgically treated: seven nevi (18.4%), one neurofibroma and one keloid (2.63% each). The lesions measured between 0.3 and



FIGURE 1: Dermatology team performing surgery in a collective effort

3cm and most of them were on photoexposed areas, with only 4 lesions on covered areas (Figures 2 and 3).

Of the procedures performed, 26 (68.42%) were complete excision: 18 with safety margins, of which 23 with primary and direct closure with interrupted stitches, one with secondary intention healing (granulation) and only one with flap. Ten curettages were performed (26.31%), seven of them with complementation of the technique with electrocautery or cryotherapy with liquid nitrogen in the bed of the wound. For the keloid, a debulking surgery was performed (2.63%), and one patient with actinic keratoses was treated solely with cryotherapy (2.63%) (Figure 4). All specimens from the patients, except for the keloid, were sent to histopathology.

The detailed data are present in table 1.

**DISCUSSION**

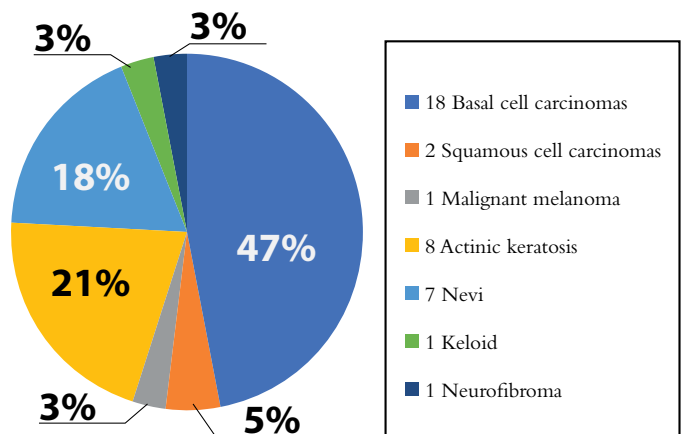
The epidemiological profile of the patients seen identified mostly elderly, with a slight predominance of females. Upon verification that most of the lesions treated were neoplastic (63.15%) we concluded that patients waiting for surgical procedures cannot wait for a long time for treatment, since the progression of these lesions is unfavorable over the months. Many times, a lesion treated not too long after the diagnosis with a minor procedure can progress in an unfavorable fashion, and later require a procedure that not only leads to disfiguration, but also evolves with metastasis.

After the histologic reports, we observed a diagnostic discrepancy in five lesions that were treated with curettage: two that were considered AKs were actually SCCs, and one considered to be SCC turned out to be an AK. The chosen procedure for these cases was curettage in view of the patients' age and comorbidities, that hindered other approaches, considering that



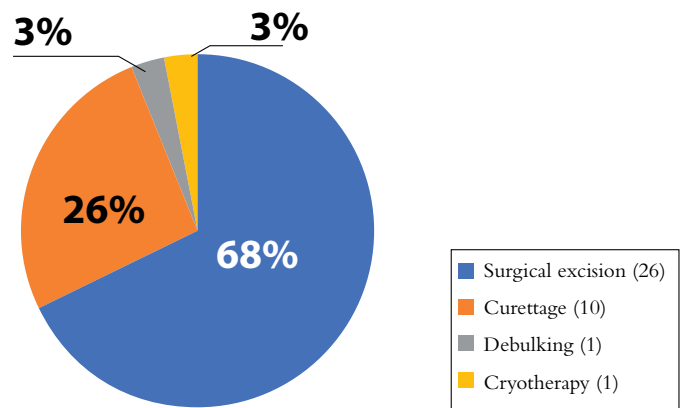
**FIGURE 2:** Some of the lesions treated: **A, B, C:** basal cell carcinomas excised with safety margins. **D:** keloid after debulking

**38 Lesions treated**



**FIGURE 3:** Listing of the lesions surgically treated

**38 Procedures performed**



**FIGURE 4:** Listing of the procedures performed by the dermatologic surgery team

all will continue with outpatient follow-up that will help detect a subsequent early recurrence. Besides those lesions, there was one collagenoma for a lesion that was considered to be a nevus; since it is a benign lesion that was completely excised, there are no further considerations for this case. There was also a suspected BCC that was excised with safety margins and had a histological diagnosis of AK.

It must be taken into consideration that due to the fact that the present study was performed in a tertiary hospital, the cases with surgical indication do not come only from this service, but are also referred from other services of primary and secondary care in the area. This increased demand is not compatible with the availability of the dermatologic surgical team, leading

TABLE 1: Listing of the patients seen and lesions treated

PATIENT	SEX	AGE	DIAGNOSIS	AREA	SIZE	PROPOSITION	HISTOPATHOLOGIC
1	F	71	BCC	L Pre-auricular L NLF	0.4cm	Excision with margins, interrupted stitches	BCC
2	F	82	BCC	R Infraorbital	0.5cm	Excision with margins, island flap repair	BCC
3	F	77	BCC	L lateral cervical	0.8cm	Excision with margins, interrupted stitches	BCC
4	M	48	BCC	R malar	1cm	Excision with margins, interrupted stitches	BCC
5	F	49	BCC	L medial canthus	2cm	Excision with margins, interrupted stitches	BCC
6	M	66	BCC	L parietal	0.7cm	Excision with margins, granulation	BCC
7	F	47	BCC	R mid dorsum	0.5cm	Excision with margins, interrupted stitches	BCC
8	M	50	Melanoma	L lateral dorsum	1.3cm	Excision with margins, interrupted stitches	Melanoma
9	M	56	BCC	R malar	0.6cm	Excision with margins, interrupted stitches	BCC
10	F	76	BCC	L clavicular Postauricular Abdomen	3cm	Excision with margins, interrupted stitches	BCC
11	F	62	BCC	R upper chest L nose	3cm	Excision with margins, interrupted stitches	BCC
12	M	46	Keloid	Upper lip	2cm	Debulking	-
13	F	21	Nevus	L face and arm	0.5cm	Excision without margins, interrupted stitches	Nevus
14	F	71	BCC	L temporal	0.4cm	Excision with margins, interrupted stitches	BCC
15	M	74	BCC	R arm	0.5cm	Excision with margins, interrupted stitches	BCC
16	F	66	BCC	R Pre-auricular	0.7cm	Excision with margins, interrupted stitches	BCC
17	M	89	AK	Chest	0.4cm	Curettage + Cryotherapy	SCC
18	M	67	SCC	R postauricular	0.8cm	Curettage + Electrocautery	AK
19	M	71	BCC	R temporal	1.5cm	Curettage + Electrocautery	BCC
20	F	66	AK	L nasal ala	0.9cm	Curettage + Electrocautery	AK
21	F	43	Nevus	R and L Pre-tibial	0.4cm	Excision without margins, interrupted stitches	Nevus
22	M	50	Neurofibroma	R dorsum hand	2cm	Excision without margins, interrupted stitches	Neurofibroma
23	M	61	AK	L shoulder	0.6cm	Curettage + Electrocautery	AK
24	F	87	BCC	R temporal	0.3cm	Curettage	BCC
25	F	92	QA	L temporal	0.9cm	Curettage	BCC
26	F	60	Nevus	Chest	0.4cm	Excision without margins, interrupted stitches	Nevus
27	M	67	BCC	Ombro E	0.4cm	Excision with margins, interrupted stitches	AK
28	M	72	BCC	Temporal E	0.5cm	Excision with margins, interrupted stitches	BCC
29	M	58	AK	Temporal D	0.4cm	Cryotherapy	
30	F	36	Nevus	Tórax anterior	0.4cm	Excision without margins, interrupted stitches	

F: female, M: male, BCC: basal cell carcinoma, AK: actinic keratosis, SCC: squamous cell carcinoma, NLF: nasolabial fold

to a current waiting list of 165 patients that wait for at least three months for a surgical procedure. With the fact that more than  $\frac{3}{4}$  of all lesions treated were malignant or pre-cancerous, it becomes clear the importance of the role of the dermatologist in cutaneous oncology, area of sanitary dermatology that also comprises occupational dermatoses, Hansen disease and sexually transmitted infections.

Some actions have been developed to reduce the waiting list for dermatological consultations in public health, such as teledermatology, that combines communication and computing technologies to dermatological practices in order to reduce the need of face-to-face encounters with the patient, offering an effective health planning.<sup>5,6</sup> Surgical approach of patients, however,

cannot be done through this route, and the dermatologist must be physically present. Hiring more dermatologists to incorporate the clinical body of the public sector is essential for the resolution of this issue, besides providing a physical infrastructure, paramedics and adequate instruments for the procedures. In the absence of this, which is costlier for the State, collective efforts are a way of reducing the waiting list for dermatological procedures.

The fact that all procedures are performed in an outpatient setting, under local anesthesia, demonstrates that there is no need to use central surgical theaters to perform most of the dermatological surgeries, reducing considerably the institution's costs and expediting the surgical bookings for the service.<sup>3</sup>

## CONCLUSIONS

This study becomes relevant because it identifies the cases of patients that await dermatological assistance in the public system in the city of São Paulo. With this, public

health strategies for dermatology can be organized, besides highlighting the important role of the dermatologist in public health, diagnosing and treating malignant and pre-malignant lesions. ●

### PARTICIPATION IN THE ARTICLE:

#### **José Antônio Jabur da Cunha:**

Study conception and planning, Actual participation in guiding the research, Intellectual participation in propaedeutic and/or therapeutic of the cases studied. Approval of the final version of the manuscript.

#### **Luiz Perez Soares:**

Intellectual participation in propaedeutic and/or therapeutic of the cases studied.

#### **Ricardo Bertozzi de Avila:**

Intellectual participation in propaedeutic and/or therapeutic of the cases studied. Data collection, analysis and interpretation.

#### **Thais Storni Regazzo:**

Intellectual participation in propaedeutic and/or therapeutic of the cases studied. Data collection, analysis and interpretation.

#### **John Verrinder Veasey:**

Study conception and planning, Preparation and wording of the manuscript.

## REFERENCES

1. G1.globo.com [Internet]. Prefeitura de SP lança programa de diagnóstico virtual para reduzir espera por consulta dermatológica. [acesso 30 ago 2017]. Disponível em: <http://g1.globo.com/sao-paulo/noticia/prefeitura-de-sp-lanca-programa-de-diagnostico-virtual-para-reduzir-espera-por-consulta-dermatologica.ghtml>
2. Weimann ETS, Silvino TST, Matos LS, Simião AL, Costa A. Delineamento epidemiológico dos casos de melanoma cutâneo atendidos em um hospital terciário de Campinas, São Paulo, Brasil. *Surg Cosmet Dermatol* 2014;6(3):2626.
3. Souza RJS, Mattedi AP, Corrêa MP, Rezende ML, Ferreira ACA. An estimate of the cost of treating non-melanoma skin cancer in the state of São Paulo, Brazil. *An Bras Dermatol*. 2011;86(4):657-62.
4. Inca.gov.br [Internet]. Pele não melanoma. [acesso 30 ago 2017]. Disponível em: [http://www2.inca.gov.br/wps/wcm/connect/tiposdecancer/site/home/pele\\_ao\\_melanoma](http://www2.inca.gov.br/wps/wcm/connect/tiposdecancer/site/home/pele_ao_melanoma)
5. Miot HA, Paixão MP, Wen CL. Teledermatology - Past, present and future. *An Bras Dermatol*. 2005;80(5):523-32.
6. Piccoli MF, Amorim BDB, Wagner HM, Nunes DH. Protocolo de Teledermatologia para triagem do câncer da pele. *An Bras Dermatol*. 2015;90(2):205-13.