

Relapses and recurrences of basal cell face carcinomas^{*}

Recidivas e recorrências de carcinomas basocelulares da face

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Abstract: To evaluate factors related to oncological follow-up of basal cell face carcinomas it was carried out the analysis of a series of cases. Four hundred sixty-five patients with 834 basal cell face carcinomas were evaluated; 3,1% presented recurrences. There was 14.7% of recurrence in incompletely excised tumors against 2.3% of the tumors with clear margins. Recurrences were more prevalent on the nose. Relapse rates showed a cumulative risk. These findings reinforce the importance of oncological follow-up after surgery of basal cell carcinoma.

Keywords: Carcinoma, basal cell; General surgery; Neoplasm recurrence, local; Pathology; skin neoplasms

Resumo: Para avaliar fatores relacionados ao seguimento oncológico dos carcinomas basocelulares da face, foi realizada a análise de série de casos. Avaliaram-se 465 pacientes, com 834 carcinomas basocelulares de face; 3,1% apresentaram recidivas. Nos tumores incompletamente excisados, a recidiva foi 14,7% contra 2,3% dos tumores, com margens livres. Ocorreram mais na região nasal. As taxas de recorrência evidenciaram risco cumulativo. Estes achados reforçam a importância do seguimento oncológico após a cirurgia do carcinoma basocelular.

Palavras-chave: Carcinoma basocelular; Cirurgia geral; Neoplasias cutâneas; Patologia; Recidiva local de neoplasia

Recurrences and relapses of basal cell carcinoma (BCC) are problems in the monitoring of patients.^{1,2} To evaluate this aspect, it was carried out the analysis of a serie of cases of patients with facial BCCs. Clinical, demographic and histopathological variables were obtained from patients charts. There was a bivariate comparisson of categorical data by G test (Willians) and residue analysis. Later, the variables were adjusted by a multiple logistic regression model. It was considered significant value $p < 0,05$, bicaudal.

All patients coming from the University Hospital of FMB-Unesp with diagnosis of facial BCC confirmed pathologically and within the period from 1995 to 2005 were included in the present work.

The study evaluated 465 patients with 834 face BCCs, 727 of them were monitored (87,2%), with an average time of 33,2 months.

Patients general data are displayed on Table 1, showing female prevalence and emergence of the first BCC between 38 and 84 years of age (95% of cases).

There was recurrence of 25 tumors (3,1%) and the characteristics related to the surgical margins are shown in table 2, being significant the association between the onset of the lateral margin by the tumor ($p < 0,01$) as well as lateral and deep ($p < 0,01$). When considering all the 34 tumors with positive margins (lateral and/or deep), the recurrence rate was 14,7% (IC 95% 2,4% a 27,1%) ($p < 0,01$). The average length of time up to recurrence was 2,4 years, varying from two months to six years (Table 1). Recurrences occurred more frequently on the risk area of the face (Table 2). There was significant proportion on the nasal area ($p < 0,05$) and absence of recurrences on the malar/zygomatic region. There was no significant difference between recurrence and the histology of BCC in this sample (Table 2). Multivariate analysis demonstrated that margin impairment was significantly associated with the risk of recurrence, regardless of histological type and topography ($p < 0,05$).

The risk of having multiple tumors was cumula-

Received on 28.10.2009.

Approved by the Advisory Board and accepted for publication on 11.03.10.

^{*} Work carried out at the Department of Dermatology and Radiotherapy of the Faculty of Medicine of Botucatu from the State University of São Paulo (UNESP) – Botucatu (SP), Brazil.

Conflict of interest: None / *Conflito de interesse: Nenhum*

Financial funding / *Suporte financeiro*: Project submitted for FAPESP funding. Processes: 2008/54627-6 and 2008/55565-4

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TABLE 1: Main clinical and demographic data from patients

		IC 95%
Patients evaluated	465	
Female sex	270 (58,1%)	54,7% a 61,4%
Age (in years) patients had the first BCC	65,1±13,1	
Tumors	834	
Tumors per patient	1,8	
Cumulative risk of new BCC		
2 BCCs (among patients who had had one)	161 (34,6%)	30,3% a 39,0%
3 CBCs (among patients who had had 2)	77 (47,8%)	40,1% a 55,6%
> 3 CBCs (among patients who had had 3)	45 (58,4%)	47,3% a 69,6%
Patients Follow-up time (months)	33,2±30,1	
Relapses/Recurrences during follow-up	25 (3,1%)*	1,9% a 4,3%
< 1year	8 (32,0%)**	12,7% a 51,3%
1-3 yearss	6 (24,0%)	6,3% a 41,7%
3-5 yearss	4 (16,0%)	0,8% a 31,2%
>5 years	7 (28,0%)	9,4% a 46,6%

* Referring to the total number of BCCs; ** Referring to recurrences/relapses

TABLE 2: Relationship between relapses and histological margins, location and histological type of tumors

	Recurrence/Relapse			Total
	No	Yes	%	
Margins				
Free	736	17*	2,3%	753
Sides affected	7	3*	42,9%	10
Deep affected	17	0	0,0%	17
Sides and deep affected	10	2*	20,0%	12
Tiny	13	2*	15,4%	15
Without information	26	1	3,8%	27
Topography				
Nasal	227	13*	5,7%	240
Epicanthus/Groove	78	3	3,8%	81
Periocular	69	2	2,9%	71
Frontal	91	2	2,2%	93
Perilabial	50	2	4,0%	52
Maxilla/Jaw	39	1	2,6%	40
Auricular	99	1	1,0%	100
Temporal	29	1	3,4%	30
Zygomatic/Malar	112	0*	0,0%	112
Without information	15	0	0,0%	15
Histology				
Nodular	545	20	3,7%	565
Sclerodermiform	140	4	2,9%	144
Superficial	19	1	5,3%	20
Micronodular	8	0	0,0%	8
Others	97	0	0,0%	97
Total	809	25	3,1%	834

* p<0,01 (Residue Analysis)

tively higher (Table 1) as new lesions appeared. 65,5% of the patients had a single lesion.

The recurrence rate was close to the recurrence rate of other works, where indices ranging from 1,3% to 3,8%³⁻⁵ were observed. Recurrence time occurred within six years which reinforces the need for prolonged follow-up to avoid complications caused by the recurrence or from the need of a new wide excision. Other works also recommend long follow-up although there is no consensus on this topic.^{3,6,7} Besides that, subsequent annual follow-up favors the detection of new BCCs in less advanced stages.

In recurrences, the second lesion occurs in an area of up to 1 centimeter of the primary lesion, which reflects the difficulty of differentiating from an "again" lesion" in the photoexposed neighborhood.⁴

Lesions completely excised corresponded to 4,2% of the total number of tumors, value comparable to values found in the medical literature and which vary from 4% to 16,6%.^{5,8,9} In these tumors, there were 14,7% of recurrences and 15,4% in the tumors with tiny margin (less than 1 mm) against 2,3% of the tumors with free margins. This information shows the importance of the follow-up and the relevance of pathology as for prognosis.

In some cases, the recurrence rate in tumors with positive margins varies from 19,8 to 67%^{4,5,8}. In these cases, some specialists recommend immediate surgical rapprochement which is still subject of discussion^{4,5,8}. It was observed that most of the lesions with

positive margins did not recur and that, many times, these lesions occurred in areas of difficult rapprochement. Even lesions with free margins may recur but this does not occur in the majority of the cases and reinforces the need for oncological follow-up.

Most recurrences occurred on the nasal and perilabial areas. Recurrences on the zygomatic-malar region were not found. The nasal region is likely to relapse,^{8,10} probably due to the difficulty of obtaining adequate margins and also because of the anatomy of this region. On the other hand, the zygomatic region showed no recurrences which can be explained by the anatomic conformation that does not impose many obstacles to the initial surgical approach. There was no significant relationship between histological type and recurrence of tumor, which contradicts other studies¹⁰ that show that infiltrative and micronodular types are more associated with relapse. This might have occurred due to the small number of tumors with such classifications in this study.

BCC recurrence rates showed a cumulative risk. The more lesions someone has had, the greater the probability of having a new tumor. These data reiterate the importance of oncological follow-up as well as the importance of health education, promoting photo-protection and self-examination

Finally, evaluated data refer to excised facial BCCs subjected to histopathological control and therefore it is not possible to extrapolate the conclusions to other therapies and other topographies. □

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How to cite this article/Como citar este artigo: Ocanha JP, Dias JT, Miot HA, Stolf HO, Marques MEA, Abbade LPF. Recidivas e recorrências de carcinomas basocelulares da face. *An Bras Dermatol.* 2011;86(2):386-8.