

Basal cell carcinoma Recurrence factors

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Abstract :

- Basal cell carcinoma (BCC) is the most common form of skin cancer, accounting for approximately 80% of non-melanoma skin cancers. Despite its low metastatic potential, BCC poses a significant clinical challenge due to its high recurrence rate, especially in certain anatomical locations and subtypes,

-We conducted a retrospective study including patients with BCC recruited between 2017 and 2023. Medical records collected included clinical characteristics and histopathological data. Factors of recurrence were analyzed using Pearson's formula.

- The study included 65 patients. The mean age was 62.9 (14.3) [19-88]. The most common locations were the nose (25%) and the cheeks (15.3%). Multiple lesions were found in 20% of cases. All the patients who had predisposing conditions such as xeroderma pigmentosum and albinism (n=3) had multiple recurrences. All the patients were treated by standard excision with 46 % having security margins of over 5mm. The margins came back positive in 20% of the cases. Out of 65 BCC, recurrence rate was 27.8% within 6 years, with 57% of them happening in the first year. The mean delay between the first diagnosis and recurrence was 1.8 year (1.5) [0.5-6]. A positive association was found between recurrence rate and a history of BCC (p=0.005), the number of lesions (p=0.02) as well as the infiltrative subtype (p=0.03). However, no association was found between size, positive margins, periorificial locations and recurrence (p>0.05).

Aim

-Describe the recurrence rate of cutaneous basal cell carcinoma and identify related risk factors.

Methods and Materials

-Retrospective study

-Patients with BCC who were treated by standard excision between the years 2017-2023

Medical records:

- Epidemiological characteristics (age, sex, phototype)
- Clinical characteristics (location of the tumour, number of lesions, size of the lesions, number of recurrence, delay between recurrences)
- Histopathologic and surgical data (histological type, limits after excision, safety margins)

Conclusion

-This study highlighted the association between BCC recurrence rate and history of BCC , the number of lesions and infiltrative subtypes

- Recognizing patients with these factors, suggests a closer follow up.

Results

Patient population (n)	65
gender ratio (M/F)	0.52
mean age of first diagnosis (y)	62.9 (14.3) [19-88]
clear skin phototype	70%

Table1:Sociodemographic data

1/Sociodemographic data:

2/Clinical data Tumor :

*Tumor characteristics:

Size varied between 2mm to 52mm.

20% of the population studied had multiple lesions. (albinism and XP n=3)



Figure1:clinical aspects of BCC

3/histopathologic Data:

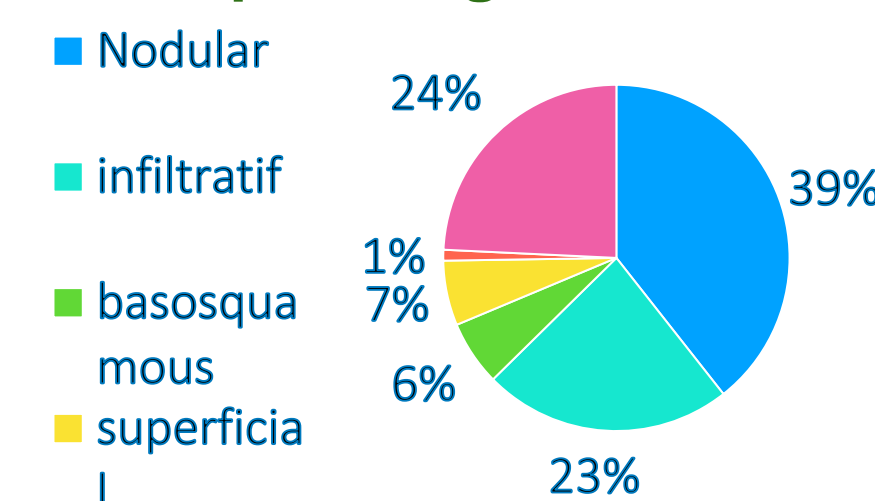


Figure4:histopathologic data

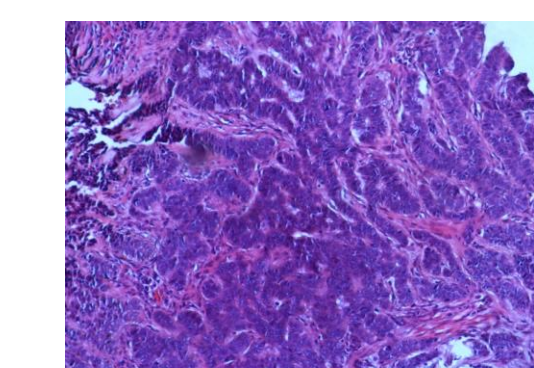


Figure 4:Non infiltrative subtype 47%

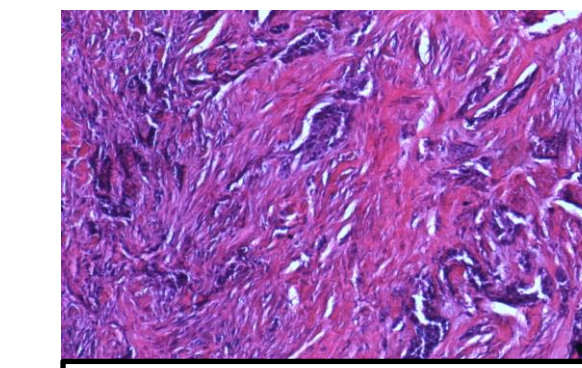


Figure 5:Infiltrative type 53

4/Surgical data:

46 % excisions had security margins of over 5mm.

The margins are determined by the risk of recurrence

5/Subtype and recurrence rate:

	infiltrative subtype	non infiltrative subtype	p
recurrence rate	45.7%	18%	0.03

6/history of BCC and recurrence rate

	low risk	intermediate risk	high risk
Lateral margins	3 to 4 mm	4 mm	5 to 10 mm peroperative margins

7/History of radiotherapy and recurrence rate

	Radiotherapy	non radiotherapy	P
recurrence rate	50%	30.9%	0.001

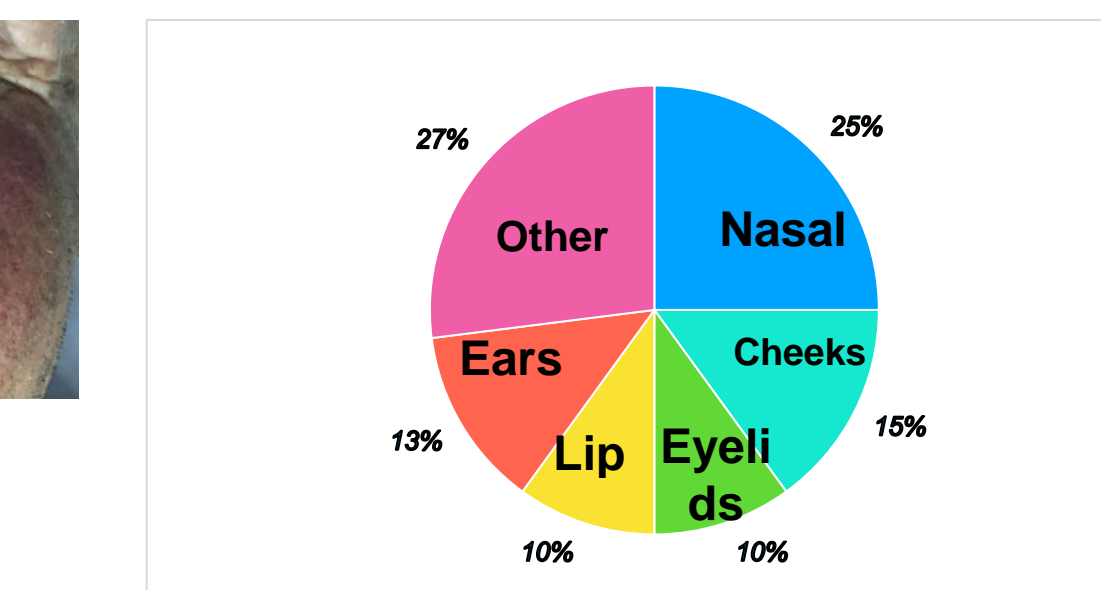


Figure3:Locations

8/Multiple lesions and recurrence rate:

	Multiple lesions	single lesion	p
recurrence rate	57.1%	20.6%	0.02

9/Recurrence rate depending on tumor site , size and margins

	tumour size <20mm	tumour size >20 mm	p
	43%	13%	>0.05
	periorificial lesions	non periorificial lesions	p
	35%	40%	>0.05
	positive margins	healthy margins	p
	53%	41%	>0.05

References

ANAES. (2004). Prise en charge diagnostique et thérapeutique du carcinome basocellulaire de l'adulte. Alsaif, A. (2021). Mohs micrographic surgery versus standard excision for basal cell carcinoma in the head and neck: Systematic review and meta-analysis. Cureus, e19981. Dika, E. (2020). Basal cell carcinoma: A comprehensive review. International Journal of Molecular Sciences, 21(15), 5572. Basset-Seguín, N. (2020). Update in the management of basal cell carcinoma. Acta Dermato-Venereologica, 100(11), adv00140.