



Basal cell carcinomas of the face: Supported Surgery

K. Tourabi^[1a*], M.A. Ennouhi^[1b], B. Abir^[1c], T. Nassim-Sabah^[1d], M. Lakouichmi^[1e], M. Mliha touati^[2]

Service de Chirurgie Maxillo-faciale et Plastique, Hôpital militaire Marrakech, Maroc
Department of oto rhino laryngology, Hôpital militaire Marrakech, Maroc

ABSTRACT

The basal cell carcinoma is by far the epithelial malignant tumor most widespread. The facial involvement represents over 65% of cases and is a risk factor for recurrence. The aim of our work is to recall the principles and methods of surgical treatment. On a nine-month period, we supported fifteen patients with basal cell carcinomas of the face the average age of our patients is 66ans (range 39-80ans). -sexe: there is a male predominance. Tumor -Size: it varies between 6 and 32mm (mean = 16 mm).-Localisation: Nasal disease is the most common. -Marge Excision: calculated by the pathologist, it varies between 3 and 15mm. Histological -type: 8cas in nodular infiltrating and 6. The skin cover has appealed to: the controlled healing (1 case), direct suture (2 cases); the total skin graft (4cas); and loco -régionaux shreds (9 cases). Early surgical recovery is deplored (skin graft removal and flap coverage). The aesthetic results are satisfactory; otherwise we can not comment on the reliability of oncological results seen insufficient decline that is available (9-18 months). Surgical treatment of basal cell carcinoma is the only guarantor of healing; gold oncologic and aesthetic requirements, particularly in terms of the face, sometimes make this difficult treatment. Improving outcomes through prevention, early detection of lesions, the close collaboration of pathologists and the creation of consultative committees bringing together multi -disciplinaire: Dermatologists and Plastic -chirurgiens oncologists for the management of difficult cases.

Keywords : Epithélioma- Basocellulaire- Chirurgie- pathological anatomy.

INTRODUCTION

The squamous or basal cell carcinoma (BCC) is by far the epithelial malignant tumor most widespread; and represents 75% of non-melanoma skin cancer (1). The facial involvement represents between 65% and 85% of cases (2,3) and is a risk factor for recurrence (4.5) .the surgery is the standard treatment of this lesion; It provides a high cure rate, particularly by histological control of margins. The aim of our work is to recall the principles and methods of surgical treatment.

MATERIALS AND METHODS

Over a period of nine months, we have taken care of 15 patients with basal cell carcinomas of the face; two of recurrence and one case in evolutionary thrust. Surgical treatment; conducted under local anesthesia, locoregional or general twofold:

-carcinologique (tumor excision with a safety margin of 3 to 10mm, taking deep hypodermis up the first anatomical barrier excluded).

-and reconstructive surgery using the controlled healing, direct skin closure; grafts or flaps loco - régionaux.

The histological examination of surgical specimens (previously directed by the surgeon) allows: confirmation of diagnosis, histological typing and assessing the quality of surgical excision.

Patients are reviewed at 3 months, 6 months and 1 year; then every year.

RESULTS AND DISCUSSION

-**AGE**: The average age of our patients is 66ans (range 39-80ans).

-**SEX**: There is a male predominance (10♂ / 5♀).

COSTUMES FOR MEN TUMOR: it ranges from 6 to 32 mm (mean = 16 mm).

-**LCOALISATION**: Nasal location is the most frequent (8cas / 15); encroaching on the orbital region

-In 2nd case-; the lesion is in the middle and upper floors of the face in 14 cases.

-**TYPE HISTOLOGICAL**: 8cas in nodular, infiltrating 6 sclerodermiform in one case.

-**MARGE** Excision: calculated by the pathologist, it varies between 3 and 10mm.la quality excision is satisfactory in 13 cases; in 2 cases it was deemed incomplete, what motivated a resumption of tumor bed and confirmation of the oncologic resection character before hedging.

-**TREATMENT**:

The surgery took place in two stages in 10 cases, coverage was conducted after confirming the completeness of tumor removal by the final histological examination.

The reconstruction uses

-The directed healing: 1 case

-the direct suture (2 cases);

-Grefe Total skin (4cas);

-lambeaux loco - regional (9 cases)

The aesthetic results are judged on the quality and location of scars, respect for aesthetic subunits and integration of cover fabric in the recipient area. Overall, they are satisfactory (see Figures 1,2 and 3); otherwise we can not comment on the reliability of oncological results seen insufficient decline that is available (9 to 18 months).

The clinical, histological and therapeutic data are summarized in Table 1.

Table 1: Summary of clinical, histological and therapeutic.

	Age	Tumor size	Headquarters	Histological Type	Treatment	Prognosis
1)O.R	73ans	15mm	inner canthus (recurrence)	infiltrating	Excision - Frontal flap coverage + internal Canthpexie.	bad
2)N.S	62ans	6mm	lower eyelid	infiltrating	Excision followed by closing after advancing a Temporomandibular	intermediate

					jugal flap.	
3)M.M	65ans	12mm	Postauricular	nodular	Excision - total skin graft..	intermediate
4)W.A	67ans	10mm	White lower lip	nodular	Excision - suture	intermediate
5)B.A	41ans	13mm	Tip of the nose	nodular	Excision - Rintala flap coverage..	bad
6)B.M	80ans	18mm	Ala	infiltrating	Excision - coverage nasolabial flap.	bad
7)L.B	59ans	32mm	temporal	nodular	Excision - skin graft..	bad
8)B.M	40ans	8mm	Side of the nose	nodular	Excision followed by skin grafting and transplantation and recovery coverage flap Rybka.	bad
9)E.M	60ans	10mm	Ala	infiltrating	Excision-coverage nasolabial flap.	bad
10)T.M	70ans	12mm	Tip of the nose	infiltrating	Excision - Rintala flap coverage..	bad
11)K.M	45ans	10mm	play	nodular	Excision - suture	good
12)A.Y	57ans	20mm	White lower lip (+ bilateral lymphadenopathy).	sclerodermiform	Excision + functional bilateral neck dissection + coverage shreds straight labial and cervical advancement flap Followed by radiotherapy	bad
13)B.H	59ans	30mm	Nasolabial fold with invasion of the lower eyelid and the inner canthus. (recurrence)	infiltrating	Excision followed by flap coverage Frontal flap + Temporomandibular jugal advancement.	bad
14)E.F	60ans	10mm	inner canthus	nodular	Excision followed by covering full thickness skin graft	intermediate
15)J.L	39ans	6mm	inner canthus	nodular	Directed excision followed by healing	intermediate

Complete excision of basal cell carcinoma is the only guarantor of healing (6). The main goal is to be carcinological to prevent recurrence, while being the most aesthetic. On the face, we must find the best compromise between the oncological and aesthetic requirements; something that is not always evident especially in our situation where we continue to see lesions evolving over years with local invasion or locoregional quite important.

Basal cell carcinoma (BCC) is mistaken for a malignancy tumor "reduced" under the pretext that evolution is slow and local. However, some forms can be very disfiguring with a functional impairment, psychological and social considerable. If No. 13 illustrates this fact (Fig 4).

In its 2004 report (4), ANAES recommends classify patients into three prognostic groups: poor, intermediate and good; based on histological and clinical criteria.

Regarding clinical criteria: the nasal cavity and peri-orificial (4, 7.8); top 10mm size, poorly defined and recurrent forms are all poor prognostic criteria.

The prognosis criteria: location extra cephalic (trunk and members) and surface forms.

The histological criteria of poor prognosis are basal cell sclerodermiform and infiltrating.

In our series of 9 patients are classified poor prognosis; 5 1 intermediate prognosis and good prognosis (see Table 1).

The risk of recurrence is low for the group of good prognosis, higher in intermediate and poor groups; justifying wider safety margins.

Thus it is recommended to respect a margin of 3mm in the forms of good prognosis; and to go further (up to 10mm), in the forms of poor prognosis.

Excision should not take into account the importance of the defect or reconstruction technique. The lymph node metastases are exceptional CBC; their frequency is estimated between 0.002 and 0.55% (1.9). The presence of lymphadenopathy (ADP) in the tumor drainage area may be related to lymph node metastasis. This possibility justifies our sense of association to the excision of the primary tumor selective lymphadenectomy .the purpose of this node surgery is to establish the accurate diagnosis of these lymph nodes.

In our series; we collected one case (No. 12) with bilateral cervical lymphadenopathy interesting Ib right and left groups, who have been made selective dissection of histological bilatéral.l'étude taken groups carried the diagnosis of basal cell carcinoma metastasis. This is a CBC sclerodermiform of the lower lip for which the patient had already received iterative incomplete resections which could explain the occurrence of metastases. External radiotherapy was introduced postoperatively.

As for the repair, it must adapt to the defect created by excision and not the reverse. Reconstruction simple ways (single suture and skin grafting) are allowed before the pathological examination; because they "do not cross the bridges" and a cover of the tumor bed is always possible. As against the use of more sophisticated means (including fragments) may be considered after histological confirmation (or extemporaneous final) the completeness of excision; as they are likely to move tumor limits, participate in the tumor swarming; unnecessary sacrifice of healthy tissue and complicate the recovery in case of incomplete resection.

Thus, the contribution of the pathologist is paramount, it allows you to make a positive diagnosis, histological type and judge the completeness of resection or not.

The interest of the frozen section is well established; but it is not always easy to perform because it requires a trained pathologist (quality preparations of frozen sections is much lower than those obtained by standard procedure after paraffin embedding (10) .that the reason why 'frozen section must be provided for the consideration of a questionable area.

Another technique is worth quoting is Mohs micrographic surgery (CMM) (widespread in the US); the principle of this surgery is to study 100% of the lateral margins and depth (as opposed to the usual techniques which analyze only 1 per 100 surgical margins (4, 6.11). thus allowing sufficient minimum excision "tailored" to avoid exposing the recurrence. The objective is to achieve maximum healing of skin tumors while sacrificing minimal healthy tissue to reach a satisfactory cosmetic and functional results (6).

The CMM is the technique for which the lowest recidivism rates are reported in the literature, particularly for the treatment of poor prognosis CBC (4, 9,12). At 5 years, the rate is ten times lower than all other treatment methods; it is around 1% (13).

It is very demanding in terms of human and requires specialized pathologists team and dedicated to this surgery. The introduction of this technique in our centers is very difficult, but it remains very desirable.

Finally, we recall that other therapeutics used in the treatment of BCC have very specific indications (radiation therapy, cryosurgery, curettage-electrocoagulation, laser CO² ...); and they do

not allow a control of the histological tumor site; This is why we must prefer their surgery whenever it is possible.

CONCLUSION

Basal cell carcinoma is a common tumor in our skies; the involvement of the face is a poor prognostic factor for recurrence, exposed to heavy aesthetic and functional damages. The improved results through:

- the prevention (anti-sun protection, public information)
- dépistage early lesions (collaboration GPs) providing the patient with greater chances of cure with minimal sequelae.
- the development of technical platforms of pathology centers.
- the creation of consultative committees bringing together multi -disciplinaire: -chirurgiens dermatologists plastic surgeons, pathologists and oncologists for loads with difficult cases.

Figures 1, 2 and 3: Clinical cases illustrating the various reconstruction means:

Fig.1- directed healing

Fig. 1 .1 : before removal



Fig. 1.2 : loss of residual substance



Fig. 1.3 : result obtained by controlled healing.



Fig.2- full thickness skin graft

Fig. 2.1 : before removal



Fig. 2.2 : full thickness skin graft (result in 1 year)



Fig.3- local flap

Fig. 3.1 : removal of a CBC back of the nose



Fig. 3.2 : local flap coverage (Rintala).



Fig. 4 : Clinical Case No. 13: CBC recurrent naso-labial fold with invasion of the internal canthus of the lower eyelid.

Fig. 4.1 : before removal



Fig. 4.2 : excision taking the lower eyelid, the internal canthus, the lateral wall of the nose, the nose wing and cheek.



Fig. 4.3 : coverage of temporo-jugal flap + rotation advancement- forehead flap back and grafted (repairing the lower eyelid is planned).



REFERENCES

- [1]. Garnier B., Simon E., Dumont T., Sellal S., Stricker M., Chassagne J-F. Les carcinomes cutanés basocellulaires méritent-ils leur réputation de tumeurs à faible malignité ?. *Rev. Stomatol. Chir. Maxillofac.*, **2005**; 106, 1, 16-21.
- [2]. Bialy T, Whalen J, Veledar E, Lafreniere D, Spiro J, Chartier T., Chen SC. Mohs micrographic surgery vs traditional surgical excision a cost comparison analysis. *Arch Dermatol* **2004** ;140: 736-42.
- [3]. Limmer BL. Nonmelanoma skin cancer: today's epidemic. *Tex Med* **2001**; 97: 56-8.
- [4]. Carcinome basocellulaire Recommandations pour la pratique clinique (Anaes 2004). *Ann Dermatol Venereol* ; **2004**;131:680-756.
- [5]. National Health Medical Research Council. Non melanoma skin cancer: guidelines for treatment and management in Australia. Clinical practice guidelines. Canberra: NHMRC; **2002**.
- [6]. Granier G., Agrici V., Habib F., Meunier L., Moustey C., Marty-Double C. La chirurgie micrographique de Mohs dans la prise en charge des carcinomes basocellulaires. *Ann Pathol* **2007** ; 27 : 74-9.
- [7]. Staub G., Revol M., May P., Bayol J-C., Verola O., Servant J.-M. Marges d'exérèse chirurgicale et taux de récurrence des carcinomes cutanés, Etude prospective de 844 cas. *Annales de chirurgie plastique esthétique*. Vol 53-N°5- Octobre **2008**. P. 389-459
- [8]. Silverman MK, Kopf AW, Grin CM, Bart RS, Levenstein MJ. Recurrence rates of treated basal cell carcinomas. *J Dermatol Surg Oncol* **1991**; 17: 720-6.
- [9]. Nseir A., Estève E. Carcinomes basocellulaires. *Presse Med.* **2008**; 37: 1466-1473.
- [10]. Verola O. les tumeurs épithéliales cutanées, rappels anatomo-pathologiques. *Annales de chirurgie plastique esthétique*, Vol.43, N°4, Août **1998**, P :301-10.
- [11]. Abide JM, Nahai F, Bennett RG. The meaning of surgical margins. *Plast Reconstr Surg* **1984**;73(3):492-7.
- [12]. Telfer NR, Colver GB, Bowers PW. Guidelines for the management of basal cell carcinoma. *Br J Dermatol* **1999**;141: 415-23.
- [13]. Neumann H. La chirurgie micrographique. *Ann Dermatol Venereol* **2004** ;131: 145-9.