

ABSTRACT
of the PhD thesis entitled
MORPHOCLINICAL OBSERVATIONS IN BASAL CELL CARCINOMA

Elaborated by the PhD candidate Dorin DOROBANȚU
Scientific coordinator: Prof. Dr. Ludovic SERES STURM

Key words

Basal cell carcinoma, anatomic and surgical principles and reconstructive techniques, skin flaps, skin graft

Introduction

Basal cell carcinoma is the most common skin cancer and epithelial cells cancer. Most patients are treated surgically. But some cases show an aggression that can take various forms, on the one hand the tumor can reach important sizes and can be locally destructive, while in rare cases can metastasize. If this aggressive tumor is located on the face or neck, the surgeon is confronted with a clinical dilemma because the removal of the tumor with clear margins is difficult due to involvement in tumor resection within safe limits of specific craniofacial structures difficult to reconstruct, even with high specificity techniques.

Aim of study

The objective of any comprehensive anatomical study is to combine harmoniously "intuitive, with expositive and practicality". The vast majority of current anatomical studies based on descriptive method using independent approach on the part of anatomical-surgical areas and on the other side of the path surgical techniques can be addressed according to anatomical region. The main objective of this clinical research is to correlate the anatomoclinical data with the therapeutic efficiency data, based on this clinical trial.

Material and method

We conducted during January 2004 - December 2009 a clinical trial, analytic, observational, longitudinal cohort, prospective and retrospective, on a number of 337 patients, aged between 23 and 89 years, treated in Reconstructive Plastic Surgery Department of Mures County Clinical and Emergency Hospital. We analyzed the incidence of basal cell carcinoma by age, by gender, type of basal cell carcinoma localization and surgical techniques used to cover skin and soft tissue defects after tumor excision.

Results

Depending on the patient gender, the distribution is almost equal (51.3% women and 48.7% men), contrary to the literature that considers that men are more frequently affected; frequency was highest in the age group 60 -79 years and the lowest in the age group 20-39 years.

Histopathological evaluation of patients, allowed assessing surgical excision in safety margins, in personal casuistry, most excised carcinomas were radically excised. In some of them, especially the

superficial, due to their multicenter character, cannot be appreciated the resection margins, i.e. one cannot exclude the presence of tumor cells beyond the margins of resection. Thus of the 337 basal cell carcinomas, 235 (73%) were excised within safe limits, for 47 (14%) cases cannot appreciate edges. Only 55 (12%) of them are not excised in limits, this being due to the late addressability to plastic surgery services, most of these forms are outdated surgical or aggressive cases of our study.

In the study, the most frequent location was in the cephalic extremity - 254 cases (nasal pyramid - 17, 45%, eyelid - 10,05% , nasal gentian region - 8,30%, front-6,80%, facial - 6.5%) followed by posterior thorax 38 cases (11.24%), 2.66% anterior thorax, upper limbs 9% and lower limbs 1.5%.

For this reason, the problem of anatomical reconstruction is very important. Studies on skin vasculature using modern means of investigation have demonstrated the overriding importance of vascular factor in performed reconstructions.

Discussions

In most cases of basal cell carcinoma, the natural evolution is slow and the prognosis is good compared to other types of malignant skin tumors. Most of the patients have a high cure rate.

Aggressive basal cell carcinoma was one of our clinical observations and research challenges. We use here the term "aggressive", which applies in some cases and has a double connotation. In some circumstances it may describe a local "aggressiveness", while in other cases it includes the process of metastasis. Local "aggression" is usually characterized by extensive growth leading to significant tissue destruction. If the initial tumor is neglected, it can lead to a significant size, involving adjacent structures.

In addition, lesion location especially on the face may prevent total excision of the tumor. These cases can also be considered as locally aggressive. Neoplastic growth may involve significantly large parts of the face, head and neck. In these cases, it is not uncommon that residual tumor cannot be completely excised, or surgical margins showing residual tumor foci. A subsequent intervention with curative intent can be very difficult and in this case it should be offered to these patients and other treatment. All clinical data were included in our study, ending with important research results.

Conclusions

1. Manner to cover defects on the head (of etiologies, different sizes and depths) should scrupulously be chosen, balancing on one hand the quality of coverage, on the other hand damage from the donor area.

1. Reconstructive techniques in reconstructive plastic surgery have scars as postoperative aesthetic result, requested by patients. Reconstructive techniques require trained personnel and special instruments, including solid knowledge of clinical anatomical and functional domains.

2. These techniques present a suitable surgical safety are compiled a series of specific surgical rules based on anatomical studies and applied only under strict oncology security.

3. Some features of anatomical configurations can be used to facilitate minimally invasive surgeries or may even be conditioned by them.

4. Continuous improvement of methods of diagnosis and treatment with the combination of means of treatment (surgery, radiotherapy, chemotherapy, understanding and use of molecular factors with clinical relevance for the treatment of basal cell carcinoma) involves using epidemiological methods, thus only being able to hold objective assessment of diagnostic and therapeutic act.

5. All cases were discussed in mixed team (dermatologist, surgeon, radiologist, oncologist, and pathologist).

6. Surgical solution chosen was adapted for each case.

7. Cancer excision is the only limit that allows obtaining relapse rates so low, that it may be considered for surgical cure.

Through our research we wanted to contribute to a common understanding necessary for anatomical and surgical studies in relation to possible solutions to approach minimally invasive surgical techniques in the context of interdisciplinary medical approach.