

Recall Activity: What Happens Before and After Basal Cell Carcinomas' Surgery?

Maria Alessandra Bocchiotti¹, Denis Codazzi^{2*}, Enrico Robotti³

1. Department of Plastic Surgery, University of Turin, San Giovanni Battista Hospital, Turin, Italy
2. Department of Plastic Surgery, ASST Monza – San Gerardo Hospital, Monza, Monza-Brianza, Italy
3. Department of Plastic Surgery, Papa Giovanni XXIII Hospital, Bergamo, Italy

DEAR EDITOR

We performed one of the most extensive study in scientific literature (3,957 excisions, 2,358 patients) about basal cell carcinoma (BCC) focusing on the behavioral patterns,¹ the risk factors associated to incomplete excisions,² and the following preferred surgical management.² The data about each patient and each surgery were carefully organized in a Microsoft Office Excel 2003 (Microsoft Corporation, One Microsoft Way, Redmond, WA 98052-6399 USA) database.

The long time lapse (from January 1992 and September 2007) of the study and the huge number of considered variables (gender, age at first intervention, months waited by the patient before undergoing a plastic surgeon's examination, date of biopsy when performed, histological subtype after biopsy, depth of infiltration after biopsy, date of surgery, anatomical site, size, surgical technique of repair, histological subtype after surgery, depth of infiltration after surgery, complete vs incomplete excision, margins involvement, multiple lesions treated in the same surgical session, and primary vs recurrent BCC) unavoidably lead to spotted missing information of our database, due substantially to desultory incomplete clinical folders. Furthermore, patient clinical folder does not include post-surgical treatment (chemotherapy, radiotherapy, etc) and surgery performed in other hospitals.

We resolve to undertake the Recall Activity, which consist in phoning and questioning all the patients that have been taken into care by Plastic Surgery Department of Riuniti Hospital in Bergamo (Italy), to decrease the number of the omitted data. Accordingly to our knowledge, the scientific literature does not provide any other example of Akin task with this purpose. During the review of patients' clinical folders, we set aside a column to gather their respective telephone number that we found on the frontispiece. We collected the phone numbers (2,358) of all the patients who had undergone BCC excision (one or more) at Plastic Surgery Department of Riuniti Hospital in Bergamo (Italy) between January 1th, 1992 and August 31th, 2007.

The Recall Activity started on December 1th, 2007 and took about seven weeks in which the phone calls were made continuously between 8.30 a.m. and 7.00 p.m. by the same person (Codazzi). After a first round of phone calls, we proceeded with a second round trying to contact patients who did not answer at first instance. We administered the same questionnaire to each patient with this approach: (i) Personal presentation of the interviewer (Codazzi); (ii) Explanation of the reasons of the call; and (iii)

*Corresponding Author:

Codazzi Denis, MD;
Department of Plastic Surgery,
ASST Monza–San Gerardo Hospital,
G. B. Pergolesi Road, 33, 20052,
Monza, Monza-Brianza, Italy
Tel: +39-340-3480425
E-mail: denis.codazzi@libero.it
Received: January 6, 2016
Revised: September 1, 2016
Accepted: September 27, 2016

Questionnaire conduction. The questionnaire investigated these aspects: (A) BCC excisions performed outside Riuniti Hospital; (B) Implementation of local radiotherapy; (C) Retrospective definition of primary or recurrent BCC; (D) Execution, ante-tempore interruption or denial of the our follow-up protocol; and (E) Other information (dead patients, transplantation recipients, ext).

The following table (Table 1) shows the year in which the patient underwent the first surgery in our Department and the number of patients operated in that year. "Missing" patients' number derived from the sum of those who didn't answer and those whose number was wrong/non-existent. The last column shows the number of interviewed patients for each year. The graph (Figure 1), built on the data of the previous table, shows that, despite the number of patients who underwent BCCs excision is almost quadrupled from 1992 to 2006 (we excluded in this evaluation the year 2007 since data collection stopped on August), the number of missing since 1997 can be considered almost constant. Rearranging numeric values in percentages (Figure 2), missing and interviewed patients are equally split before 1999 while the latter rises over 60% (with peaks over 80%) after 1998.

The aim of Recall Activity was to single out some missing or deficient data not identifiable by other sources, such as: (i) BCC excisions

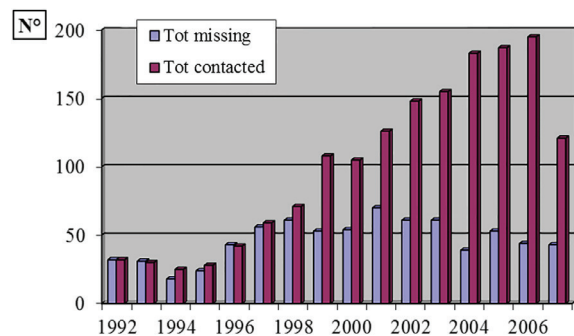


Fig. 1: Number of missing vs contacted patient related to year of first BCC excision.

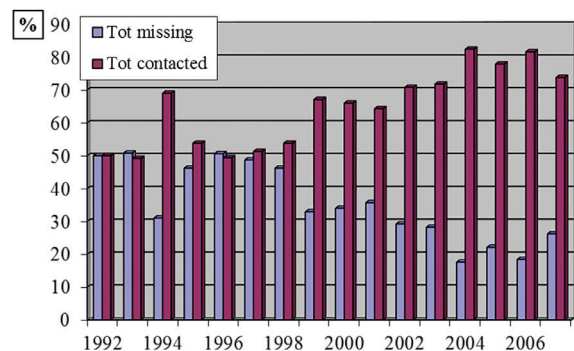


Fig. 2: Percentage of missing vs interviewed patient related to year of first BCC excision.

Table 1: Detailed number of missing vs interviewed patient related to the year of first BCC excision.

Years	Total patients	Patients who did not answer	Wrong/not-existent	Total missing	Total interviewed
1992	64	13	19	32	32
1993	61	17	14	31	30
1994	43	7	11	18	25
1995	52	9	15	24	28
1996	85	22	21	43	42
1997	115	35	21	56	59
1998	132	34	27	61	71
1999	161	26	27	53	108
2000	159	32	22	54	105
2001	196	47	23	70	126
2002	209	42	19	61	148
2003	216	30	31	61	155
2004	222	23	16	39	183
2005	240	33	20	53	187
2006	239	34	10	44	195
2007	164	40	3	43	121
Tot	2,358	444	299	743	1,615
%	100	18.8	12.7	31.5	68.5

recipients, ext).

BCC excisions performed outside Riuniti Hospital: By now, Italian Public Health Department does not have a National Archive that integrates the data of each patient treated on National territory.

This deficiency prevents the proper flow of medical history information which are still left to patients' (whose median age, in our study, was nearly seventy years old) mnemonic capability or to their personal, and often incomplete, papery archive. Of the 1615 patients contacted, 129 (about 8%) reported to have undergone excision of skin lesions, after our surgery, in other Hospital. Without *Recall Activity*, we should not single out these cases. Independently from the impact of that percentage on the global BCC recurrence value, we found an insurmountable bias that all retrospective studies should consider.

Implementation of local radiotherapy: Local radiotherapy (RT) is part of medical treatment for the management of BCCs.³ Currently we restrict RT to these two groups:¹ (i) Elderly patients who are not allowed to undergo general surgery (due to anesthesiological reasons) for excision of BCCs; and (ii) Elderly patients who underwent incomplete excision (local anesthesia) and are not allowed to undergo general surgery (due to anesthesiological reasons) for radicalization. We addressed 14 patients to the first group and 15 to the second one (1.8%); of these 29 patients, 10 (i.e. 34.5%) have shown local recurrence with a time varying from a few months to more than twenty years. The *Recall Activity* was the only way to become aware of the impact of RT on BCC treatment.

Retrospective definition of primary or recurrent BCC: We have already discussed the bias to define a lesion as primary or recurrent because of the frequent lack of accurate information about medical or surgical treatments both inside and outside the hospital. Furthermore, only 10% of folders shown unmistakable location of BCC and the clear reference to previous BCC excision. The *Recall Activity* clarified the dichotomy between primary and recurrent BCC in the residual 90% of cases.

Execution, ante tempore interruption or denial of our follow-up protocol: Of the 1615 patients contacted, 819 (50.7%) carried out a follow-up that has been routinely extended for one year (1, 3, 6, 12 months later) and, in high risk body areas (H-zone),^{1,2} up to 4 years (routinary checks for the first year and then

24, 36, 48 months later). Of these, about 6% decided for logistical reasons (age, difficulty with walking, distance from the hospital) to make regular checks at General Practitioner, at Geriatrician (patients in retirement homes) or at their Dermatologists rather than at our outpatients' department. From *recall activity* it results that over 50% of the patients contacted hadn't consciousness of having undergone an excision of a skin cancer.

Epidemiological considerations: The 1600 patients contacted represent a significant slice of the population about which it can be made some epidemiological considerations. • Nearly 10% of patients died and the reasons are not related to BCCs or to their excision but mainly for cancer (3%), cardiovascular (2%) and age-related (2%) causes. • Patients who underwent solid organ transplantation are 15 (0.6% of total): 8 single kidney, 4 heart only, 1 combined heart and kidney and 1 aorta artery only. These patients shown, for drug-induced immunological suppression, a rate of BCCs of at least 10 times higher than our population sample. Nine Patients were monitored monthly by Dermatology Department so that new lesions could be easily detected and treated early (that's why the number of patients that came to our attention is so small). • Over 90% of patients did not carry out further dermatological check up at the end of indicated follow-up. • 98.8% of the contacted patients was satisfied for both aesthetic and functional results and for the professionalism of both the medical and nursing staff.

The *Recall Activity* brought to light the huge amount of information lost before and after surgery. Paper report collects incomplete information due to low patient summary capability and/or to medical doctor accuracy. A Digitize National Archive that connects all Hospitals' database is going to become a need: each patient should have a personal digital folder that sum up all medical information. First attempts with common software among different Hospitals are already under developing and the target did not seem too far.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

KEYWORDS

Recall activity; Basal cell carcinoma; Surgery

Please cite this paper as:

Bocchiotti MA, Codazzi D, Robotti E. Recall Activity: What Happens Before and After Basal Cell Carcinomas' Surgery? *World J Plast Surg* 2017;6(1):125-128.

REFERENCES

- 1 Codazzi D, Van Der Velden J, Carminati M, Bocchiotti MA, Di Serio C, Barberis M, Robotti E. A single-center retrospective study on 3,957 consecutive excisions of basal cell carcinomas. BCC behavior patterns: retrospective statistical analysis. *Eur J Plast Surg* 2012;**35**:293-8.
- 2 Codazzi D, Van Der Velden J, Carminati M, Bruschi S, Bocchiotti MA, Di Serio C, Barberis M, Robotti E. Positive compared with negative margins in a single-center retrospective study on 3,957 consecutive excisions of basal cell carcinomas. Associated risk factors and preferred surgical management. *J Plast Surg Hand Surg* 2014;**48**:38-43.
- 3 Zbar RIS Skin tumors I: Basal cell and squamous cell carcinoma. In: Selected readings in plastic surgery. Baylor University Medical Center, Texas. 2004; Vol 10, Number 3, Part I.