



How to reduce wrong-site skin lesion excision

Two examples of adverse events

1. "An 82-year-old woman was referred to a plastic surgeon by her dermatologist for excision of a basal cell carcinoma (BCC) on the right side of the nose. The patient arrives with a letter from the dermatologist. There is no picture or diagram attached despite the extremely discrete nature of the lesion. The intervention, deemed to be non-complex and non-urgent, is performed as outpatient surgery without a preoperative consultation. The area to be excised is identified in theatre with a magnifying device (x 6) and the patient's help. Examination of the frozen specimen shows healthy margins.

A flap is performed to cover tissue loss. Seen again in consultation one week later, the patient expresses her dissatisfaction because the area to be operated upon, according to her, is located too high. This is confirmed by the anatomical pathology result which shows a dyskeratotic area without degeneration. Thus, the surgeon

asks the prescribing dermatologist to identify the lesion site using a drawing. Another intervention is performed allowing, this time around, the malignant lesion to be excised".



2. "Excision of a basal cell carcinoma on the left cheek. At the time of the surgical procedure, the patient, a 66-year-old man, tells me that the lesion is hardly visible. I see a small persistent erosion, and I therefore choose to remove it.

However, the lesion for which he had consulted 2 months earlier was located immediately next to a tuberous naevus located 2 cm higher on the cheek. Having told me that the lesion had disappeared, I did not pay attention to the initial lesion, but rather to another lesion located a little lower down. As the two lesions were

close together, the patient did not react during the surgical procedure, but rather when he was discharged from the outpatient department. The absence of photos and early identification is the cause of this event".

Since 2008, the approved accreditation body PLASTIRISQ has identified the risk "of wrong-side or wrong-site errors made by the patient during an intervention" as an important and overlooked subject because little literature exists on this subject. Everyone has heard "hunting stories" or more rarely comments on the judicial consequences, but few doctors have taken steps to reduce this risk.

Out of the 5000 events recorded in the experience feedback database for plastic surgery since 2008, the analysis revealed an increased risk in dermatological surgery. 85 events resulting in surgical site errors (excluding patient errors) in dermatological surgery have been extensively studied in order to determine the root causes of this risky situation.

The aim of the proposed safety solution is to reduce the identified root causes.

Context of the risky situation

Two different mechanisms may lead to failure of skin lesion excision:

- a localisation error (intervention on the wrong site);
- and incomplete excision (made difficult by a prior biopsy).

This risk is increased:

- by the nature of the lesions:
 - a patient with multiple skin lesions increases the risk of confusion (face or body),
 - a patient with other lesions that interfere with the interpretation of or modify local data: intercurrent tumour diseases, scar,
 - lesion rendered almost invisible by the biopsy: common on the face, particularly the nose, and for small tumours over the entire body,
- by the involvement of numerous people during management: corresponding doctor, surgeon, caregivers;
- when cooperation with the patient is difficult: confusion, disinterest, difficulties expressing themselves, patient poorly informed beforehand.

Consequences:

- immediate or delayed revision surgery;
- missed lesions, loss of opportunity and unfavourable disease progression.

Causes of the risky situation

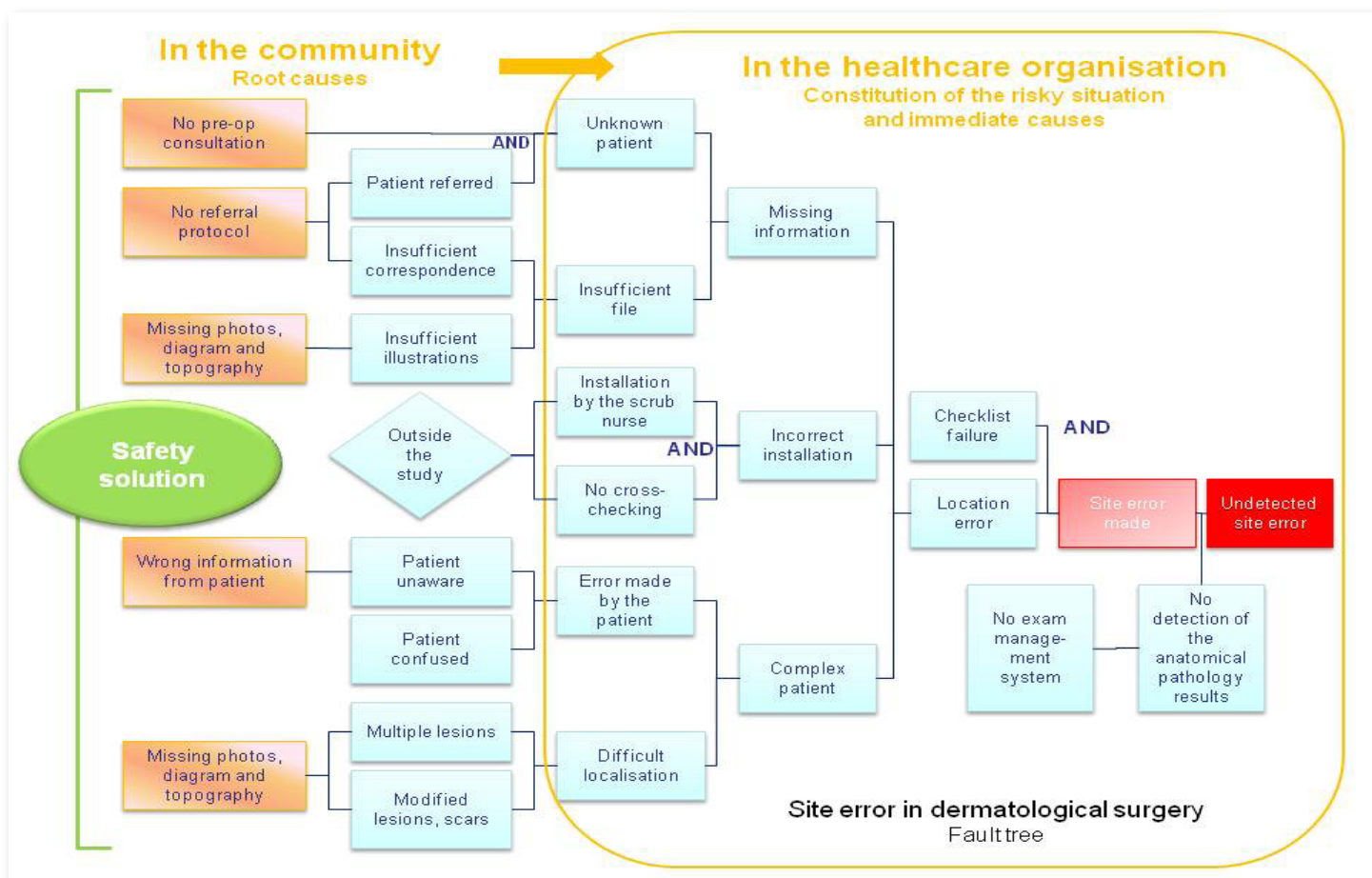
A breakdown in communication

- Between the corresponding doctor (dermatologist or general practitioner) and the operator.
- In particular, an inaccurate localisation of the lesion.

Surgical management done too quickly

- The operator did not carry out a preoperative consultation.
- Insufficient identification time and/or pre-operative marking (but the constraints related to the various forms of management must be taken into account, particularly for interventions performed in outpatient settings).
- Non-use of the checklist.

Inconsistencies in the anatomical pathology results during the post operative follow-up.



Solution to reduce the risky situation

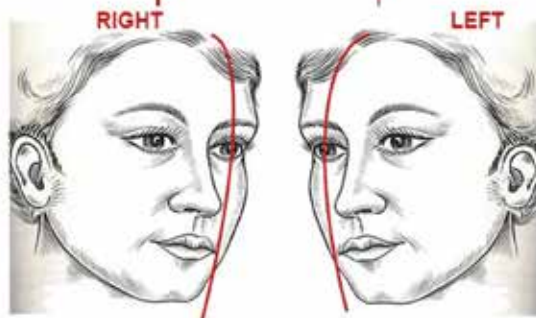
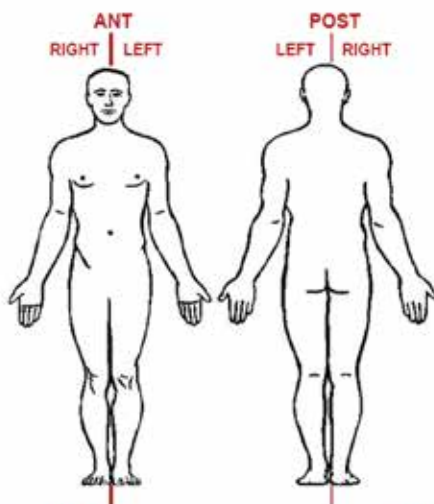
The developed solution suggests the implementation of:

- preventative actions with ① the use of a standardised communication medium, ② the taking of digital photos;
- a recovery action, if the event occurs, with ③ the safe management of anatomical pathology exams;
- as well as ④ a reminder of the good clinical practices.

① PREVENTION: the liaison sheet in dermatological surgery

This sheet completes the usual correspondence between practitioners by providing the essential information regarding the anatomical location on the front page (with a diagram). The back of the sheet includes a section for additional comments if necessary.

Liaison sheet in DERMATOLOGICAL SURGERY	
Correspondent's contact information (or stamp)	Patient ID (or sticker)
Last name:	Last name:
First name:	First name:
Address:	Date of birth:
Telephone:	SS No.:
Clinical diagnosis	Specialist Consultation date: Number of lesions:
Basal cell carcinoma 0	Comments:
Squamous cell carcinoma 0	
Melanoma 0	
Revision 0	
Other 0	
Specify:	
Identification	
Side: Left 0 Right 0	
Face: Ant Post 0	
Anatomical landmarks:	
.....mm.....	
.....mm.....	
Appearance	
Diameter (if circular):	
Length:	
Width:	
Other information: (colour, asymmetry, etc.)	
Photos	
Performed: YES NO	
Date:	
Photos attached: YES NO	
Photos given to the patient: YES NO	
Biopsy	
Performed: YES NO	
Date:	
Result attached: YES NO	
Specimen orientation:	
..... Suture at o'clock	
..... Suture at o'clock	



This is a communication medium which can be used between the professionals caring for the patient.

- Ideally, the sheet is started by the practitioner making the diagnosis (dermatologist, general practitioner).
- This sheet may accompany the patient during his/her subsequent consultations.
- It is filled in as needed (dermatologist, surgeon, anatomical pathologist, etc.).

The sheet is sent via the usual correspondence methods used between practitioners (by mail, by the patient himself, etc.).

In the hospital sector, the sheet is attached to the patient's medical file. It is in the file during the intervention.

A copy of this sheet is attached to the surgical report sent to the corresponding doctor.

Please note: This sheet is a medium that may improve patient education and participation in his/her management. If it is given to the patient, the patient must have been given full information and have benefited from a diagnosis announcement consultation in the event of cancer pathologies.

2 PREVENTION: taking digital photos of the lesions

Taking digital photos of the lesions is an integral element of the former liaison sheet. These images, taken prior to excision, enable a precise description to be made regarding the localisation and type of lesions. They represent medical and legal documents of major importance.



Take two types of images: 2 photos

After having identified the lesion with a dermatological pencil mark (arrows, circle, clinical limits, etc.) take the following:

- a **regional image** allowing location of the lesion compared with the anatomical landmarks;
- a **close-up image** allowing visualisation of the lesion (colour, shape) and its size (use of a small millimetre ruler).

With which cameras? 2 possibilities (non-exclusive)

- **The patient's camera** or that of his/her family (camera, mobile phone): the patient is then responsible for sending the photographs to the other professionals. Confidentiality and medical privacy are maintained in the communication chain;
- **The practitioner's camera**: the images are taken by the doctor prescribing the therapeutic approach.

They are sent by secure means or printed and attached to the liaison sheet.

3 RECOVERY: following up the anatomical pathology results

Despite all the precautions taken to prevent wrong-site errors, the practitioner must consider that the risk is not reduced to zero. The organisation of, in his/her office, the systematic follow-up of pending anatomical pathology samples after surgery may make it possible to detect situations where the result is discordant and to salvage them.

Types of actions to be implemented

- Exam traceability: quantitative follow-up, logbook recording what has been sent and received, consistency between the number of operated patients and the number of results.

- Systematic validation of the results by the operator.
- Documentation of the interpreted results in the patient file.
- Systematically send a copy of the results to the corresponding doctor.

4 Reminder of good clinical practices

Give preference to patient participation

- Overall, the use of the previously proposed solutions will improve patient education (and facilitate the practitioner's duty to provide information), and attempts to obtain the patient's consent, and increase his/her involvement during the surgical phase.
- Use a mirror during the consultation and in theatre (and, if necessary, plan for the patient to have his/her glasses with them in theatre).
- In case of doubt: postpone the intervention and see the corresponding doctor again.

Improve certain surgical phases

- Systematize the identification time and/or surgical marking with, if possible, the patient's

participation (stop the surgery in cases of discrepancy until confirmation).

- Verify the contents of the surgical record.
- Use a surgical checklist (including *time-out*).

Improve the post-surgical follow-up

- If the anatomical pathology results are discordant:
 - contact the consulting doctor;
 - definitely see the patient again;
 - announce the damage;
 - schedule another intervention.

Who is concerned?

This Patient Safety Solution is recommended in dermatological surgery when the number or location of the lesions transmits a risk of incorrect identification, particularly in the management of malignant lesions (squamous or basal cell carcinoma, modified or atypical naevus, malignant melanoma and Dubreuilh's melanoma).

This concerns all plastic or dermatological surgical activities resulting in the excision of a skin lesion. This activity may be carried out in a community medicine setting or in a healthcare organisation: in an out-of-hospital, outpatient or hospital setting.

McGinness conducted a study on the risk of lesion identification error after biopsy. The patient is mistaken in 16.6% of cases, the surgeon in 5.9% of cases and the two together in 4.4% of cases. The use of pre-operative photographs makes it possible to localise the surgical site in 100% of cases (4).

The study carried out with 300 Mohs surgeons by Ke M reveals that 14% of complaints for practice errors are related to a wrong-site error in dermatological surgery (5) and concludes that photography is useful to accurately identify the biopsy sites.

In the conclusion of his literature review, Lauren Y concludes that the use of a surgical site identification protocol in a healthcare safety model is a useful step to prevent the occurrence of wrong-site errors in dermatological surgery (2).

Literature

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For more information



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