

## Rotation flap of the nose

Edoardo Guasco Pisani, Paola Monari, Piergiacomo Calzavara-Pinton

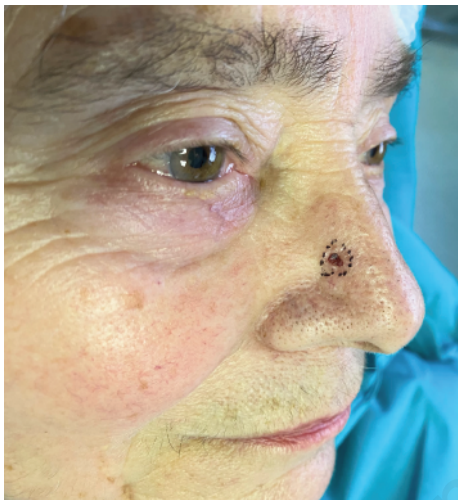
Dermatology and Venereology Unit, ASST Spedali Civili, Brescia, Italy

### The case

A 84 years old woman came to our attention with an ulcerated lesion of the nose referred to be present for about 4 months. Clinical diagnosis of basal cell carcinoma was made, and surgical removal was scheduled.

We checked the clinical and dermoscopic margins of the lesion (as showed in the Figure) and we kept 4 mm of free skin from the margins.

How would you remove this nose lesion?



### Our choice

We chose to perform a rotation flap of the nose.



Design of the flap with Burow's triangles.

### Comment

Reconstruction of surgical defects due to tumor removal can be sometimes challenging for dermatologic surgeons, especially in anatomical areas with complex topography such as the ear and the nose. In order to overcome these obstacles, flaps are the first choice of treatment.<sup>1,2</sup>

Rotation flaps consists of a surgery technique that allows to close a primary skin defect by rotating adjacent tissues around an axis.<sup>3</sup> They are based on a curvilinear or an arcuate shape which are ideally the best choice to close triangular defects. If the lesion is round or has another shape, it may be required to enlarge the defects into an isosceles triangle along the arc of the tissue movement before flap transfer.<sup>4</sup> Rotation flaps are usually performed for lesions located on the on the lateral face, cheeks, chin, and scalp.<sup>3,5</sup>

In our case the suspected tumor was big so primary closure was not an option because this kind of closure would have deformed the ala nasi by pulling it up. Furthermore, the island flap from the naso-labial fold was considered not an ideal choice because it could cause the "trapdoor effect" i.e. a bulging, elevated deformity that appears 3 weeks after the intervention.

Lastly another option could be a skin graft which is defined as a transfer of skin from the donor site to the recipient site without a blood supply. A very important downside of skin grafting is the different color and texture of the donor skin compared to the recipient skin, so the final outcome is aesthetically not pleasant.

Therefore, we opted for a rotation flap because its curvilinear incision lines keep the round shape of the tip of the nose, they better blend in with the boundary lines of the esthetic subunits and the esthetic outcome is more agreeable since the eliminated tissue is replaced with skin coming from the same anatomic site (though with same texture and width).



The patient after 12 days from surgery.

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## References

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