

Press release from Toulouse CHU

Toulouse, October 7th 2019

Surgical innovation

Skin cancer: a novel nasal reconstructive surgery performed at Toulouse University Hospital

Using a surgical technique that has never been applied before, Dr Guillaume de Bonnecaze¹ and Prof Benoît Chaput² reconstructed the nose of a patient who had five basal cell carcinomas. An article on this surgery was published in the international journal *Head and Neck*³.

A new approach to care

Surgery is always the treatment of choice for basal cell carcinoma. The challenge is to enable the patient to regain a normal quality of life, from an aesthetic point of view with a nose free of lesions or scarring, but most of all from a medical point of view, with normal nasal breathing.

Conventional surgery consists of "borrowing" skin from the forehead for a forehead flap after extraction of the carcinomas. For the patient on whom surgery was performed by the teams at the Toulouse University Hospital, this technique was not feasible. In fact, he also had tumours on his forehead which were treated medically.

*The most common non-metastatic skin cancer, **basal cell carcinoma**, usually occurs after the age of 60. It is always induced by prolonged exposure to the sun or to ultra-violet rays in tanning booths.*

It is most frequently found on the face (eyelids, lips, nose, forehead, etc.), scalp and neck and sometimes the arms. It appears as a common, painless lesion.

The physicians decided to remove skin from the fold beneath the chin. This area is more distended, thicker, and therefore of better quality. After drawing the cutting lines, the skin is lifted and passed over the chin and lips to cover the nose.

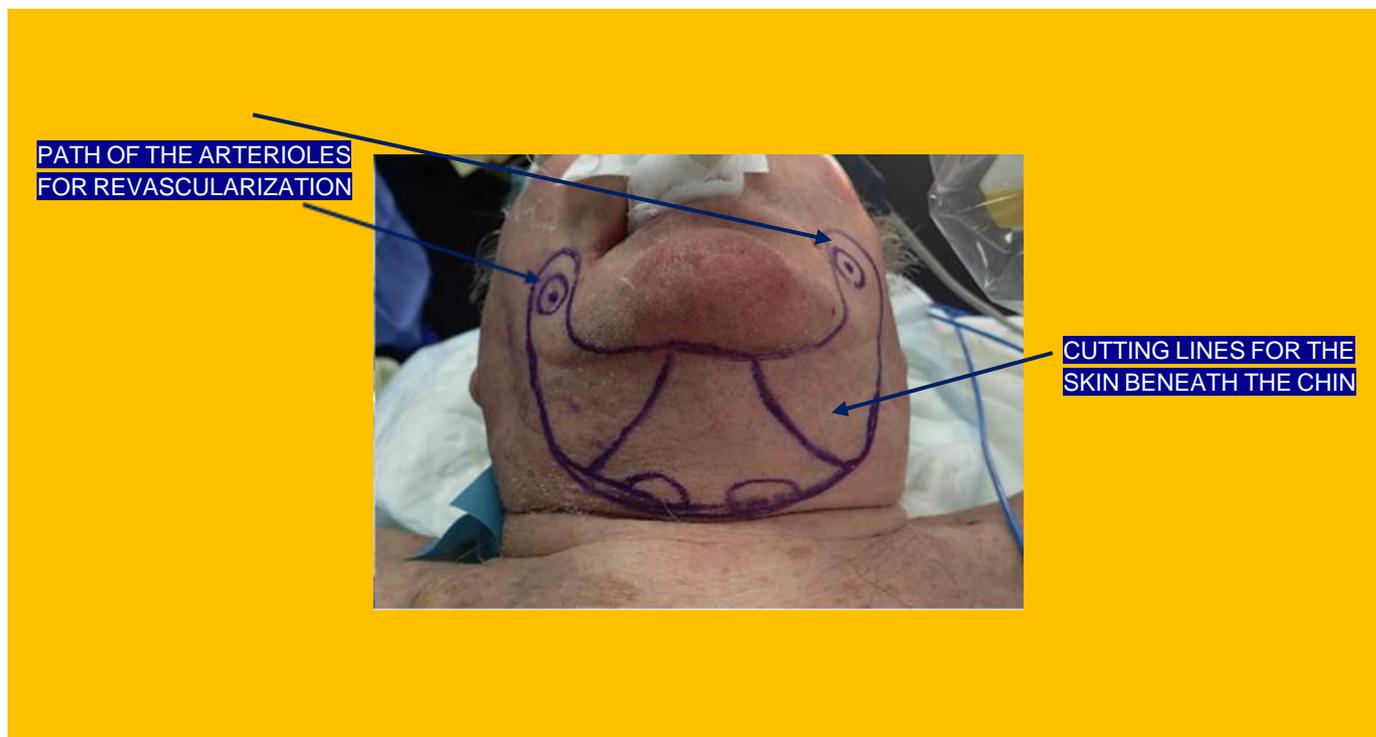
The challenge of this innovative surgery: revascularizing the skin at the recipient site

When the forehead is the donor site, the forehead flap is turned over and lowered onto the nose and remains vascularized by the frontal vessel to which it is attached. This is not the case with the skin beneath the chin, which is much thicker and **requires revascularization once placed at the recipient site**.

The surgeons came up with the idea of "**diverting**" **two arterioles (each the size of a hair)** from among those running along the two facial arteries. These two arterioles, still "connected" to their nourishing arteries, were exposed and then raised towards the nose, each under a skin bridge along the nasolabial folds. Three weeks later when autonomous vascularization was re-established the two skin bridges containing the arterioles were removed.

One year after the operation, the results of this first surgery are positive: the patient is doing well, breathing normally and has no scars on his nose.

To validate this new technique, studies are scheduled to compare it with the traditional forehead flap technique.



¹ ENT and Head and Neck Surgery - Prof Elie Serrano - Hôpital Larrey

² Plastic, reconstructive and aesthetic surgery - Prof. Jean-Louis Grolleau - Hôpital Rangueil

³ **"An innovative reconstruction procedure of total nasal resurfacing with a bipediced propeller perforator flap"**- Head & Neck. 2019;1-7 - **Guillaume de Bonnecaze MD, PhD1** | **Benoit Chaput MD, PhD2**

<https://doi.org/10.1002/hed.25790>

Press contacts:

- **CHU DE TOULOUSE, DIRECTION DE LA COMMUNICATION, HOTEL-DIEU SAINT-JACQUES,**
 - [Dominique Soulié](#) - tel.: +33 (0)5 61 77 83 49 - mobile: +33 (0)6 27 59 58 96
 - [Mathilde Ratineaud](#) - tel.: +33 (0)5 61 77 86 75 - mobile: +33 (0)6 09 64 27 52