

The Freestyle Facial Perforator Flap, a New Workhorse Local Flap?

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Abstract

Background

Since 2008 we are increasingly using island perforator flaps instead of local pedicle flaps in the reconstruction of moderate size skin defects of the face. We want to present the simplicity and reliability of our method and emphasize key steps in flap dissection and planning.

Methods:

Initially we carried out a careful dissection with loop magnification looking for a perforator in a planned local flap that subsequently was turned into an island flap based only on the nearest available perforator. Plan B was a full thickness skin graft. We published our initial experience of facial artery perforator flaps to establish the safety of the method for the reconstruction of moderate-sized facial defects¹. A retrospective case series of 19 patients with moderate size oncologic skin defects reconstructed in a single operation using 21 local island perforator flaps.

Results:

In every case we located a sufficient perforator where expected by careful exploration and designed an island flap accordingly. The pedicle can usually be “felt” as a resistance with the dissecting instrument indicating to slow down the dissection and establish what it contains. Once the perforator is noted the flap can be released around it to allow mobilization, transposition or advancement. Three out of four flaps were transposed on the perforator pedicle in a propeller fashion 90-180 degrees and the remaining flaps were advanced. Two minor complications occurred early on in our series representing a learning curve and a corrective procedure was performed in four patients. Reconstruction was successfully achieved in all cases.

Conclusions:

The freestyle facial perforator flap is a good option for the reconstruction of facial subunits combining the freedom of the island design and increased angle of rotation of the perforator pedicle. With a careful planning and basic anatomical understanding a pleasing result can be achieved in one operation with minimal donor site morbidity and a low rate of complications.

Reference:

1. Gunnarsson GL, Jackson IT, Thomsen JB. Freestyle facial perforator flaps a safe reconstructive option for the moderate-sized facial defects. Eur J Plast Surg (2014) 37:315–318

Disclosure/Financial Support

The authors have no disclosure or financial interest in the presented material