

PERFORATOR FLAP: AN EXCELENT ALTERNATIVE FOR MIDFACE RECONSTRUCTION

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Perforator flap: an excellent alternative for midface reconstruction

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INTRODUCTION

A perforator flap is a skin or subcutaneous tissue flap based on the dissection of a “perforating vessel”. In recent years, a large number of perforating flaps have been designed and described. By minimizing the trauma of flap harvesting, perforator flaps aim to minimize donor-site morbidity while providing the reconstructive surgeon more versatility than other flap types.

CASE REPORT

This is a report of 3 cases of midface reconstruction after tumor resection. In the first case, a rotation subcutaneous flap based on axial irrigation (single pedicle) was chosen. Despite good rotation and coverage of the area to be reconstructed, flap failure is noted on the periphery (Figure 1C). A skin graft was performed on the second patient that provides a reduced volume in the malar area, and tissue loss in some areas (Figure 2B). In the third case, the flap was created based on the perforating arteries. This is a big V-Y flap. The skin and subcutaneous plane are cut in 360 degrees until the muscular layer, but the flap remain supported by the perforating arteries of the subcutaneous cellular tissue beneath it (Figure 3). Notice the vitality of the flap in its totality after 7 days. It also allows better vascular supply for grafts placed close to it.



Figure 1. A rotation subcutaneous flap was performed. Fifteen days after surgery, a flap failure (C) is noted on the periphery .

DISCUSSION

The flap irrigated by perforating arteries has been increasingly used in general plastic surgery, and the case demonstrated here aims to encourage oculoplastic surgeons to use it in facial reconstructive surgeries. These flaps are performed as a single multiperforator fasciocutaneous advancement flap based on random perforator musculocutaneous flaps. Principles of vascular anatomy and perforating vascular territories (perforasome) can be used to reevaluate the vascular base of the flap and modifications to the flap design to maintain vascular integrity.



Figure 2. Skin graft had failure (B) in some áreas and reduced and irregular volume

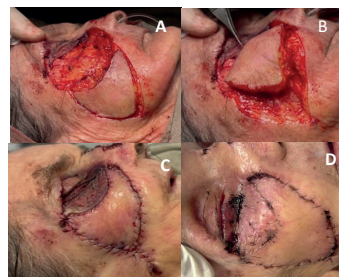


Figure 3. Perforator flap. Notice the vitality of the flap in its totality after 7 days.

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