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Title:

A Propeller SGAP Flap Raised from a Previous Gluteus Maximus Myocutaneous Flap to Reconstruct a Recurrent Type IV Sacral Pressure Ulcer

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Conflict of interest

None

Funding

None

Short Running Head:

SGAP Flap from a Previous Gluteus Maximus Myocutaneous Flap

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In challenging scenarios, recycled flaps from previous procedures can be used to reconstruct defects. [1] We report the first described case of a propeller superior gluteal artery perforator (SGAP) flap raised from a previous gluteus maximus myocutaneous flap for a recurrent type IV sacral pressure ulcer.

Our patient, a 54-year-old paraplegic, sustained a T2 spinal injury in a road traffic accident. The patient first developed pressure sores in 2002 which required debridement and reconstruction. The patient had previously undergone excision of a sacral pressure sore and reconstruction with a left gluteus maximus myocutaneous flap, excision of left ischial pressure sores and reconstruction with a posterior thigh fasciocutaneous flap and a right ischial pressure sore excision, reconstructed with a posterior thigh flap. Recurrence required excision and further reconstruction with a right gluteus maximus myocutaneous flap. The patient then developed a right trochanteric pressure sore reconstructed with a tensor fascia lata flap.

This patient presented to our Plastic Surgery Pressure Ulcer service with recurrence of the sacral and left ischial pressure sores. Given the patient's extensive history of pressure ulcers and the paucity of flap options available, the senior author (LT) designed an SGAP flap from the patient's previous right sided gluteus maximus myocutaneous flap (Figure 1A).

The sacral defect cavity was completely excised down to bone. The SGAP flap was raised on a perforator, pre-operatively marked with a handheld Doppler, and found through exploratory dissection from the lateral margin of the defect (Figure 1B). The flap was harvested on this perforator and islanded then rotated 140 degrees anticlockwise to reconstruct the sacral defect (Figure 1C). The patient was nursed in the left lateral position and recovered well postoperatively. The flap remained healthy despite a small superficial area of wound dehiscence that was treated conservatively. Three months post-operatively, the SGAP flap looked healthy and the patient had returned to his activities of daily living, including sitting out in his wheelchair for up to four hours (Figure 1D).

The development of perforator-based flaps has given rise to a variety of potential donor sites useful to reconstruct pressure ulcers. The SGAP flap is an example of a fasciocutaneous perforator flap that provides a considerable amount of tissue with good vascularity, and is shown to achieve good long-term outcomes for ulcer recurrence and complication rates. [2]

This letter shows that the combination of meticulous surgical dissection and sound knowledge of anatomy means the pedicled SGAP flap may be raised from a previous local flap and may be a viable option for reconstruction in challenging cases.

Conflict of Interest

The authors declare that they have no conflict of interest.

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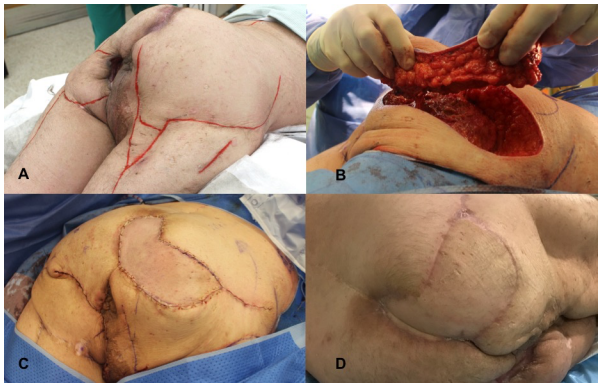

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