

Surgical images: musculoskeletal

Sural neurocutaneous cross-leg flap

A 7-year-old girl presented to the multinational medical unit at Kandahar Airfield with an open lateral malleolus fracture secondary to a blast injury. Serial débridement procedures preceded a vacuum-assisted closure dressing applied for 8 days (Fig. 1). Flap coverage was needed, and because of the location

and size of the wound, no local options were feasible. The ipsilateral lesser saphenous vein and sural nerve had been injured, and there was no access to microsurgical expertise.

Although currently out of favour, a cross leg flap was chosen in this case. A sural neurocutaneous flap was harvested from the contralateral leg. An external fixator was then applied to hold the legs crossed (Fig. 2). The periphery of the

traumatic wound and the sural flap donor site were skin grafted immediately. Although awkward, the leg position was tolerated well by the patient. Twenty-one days after the index surgery the pedicle was divided. Vigorous retrograde bleeding was noted from the severed pedicle. Two days later the flap was trimmed and inset. No necrosis or venous congestion occurred at any time (Fig. 3).

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FIG. 1. Wound over the lateral malleolus. At this point, the traumatic wound on the right ankle had undergone 8 days of vacuum-assisted closure treatment. Bone is still visible in the wound (arrow).

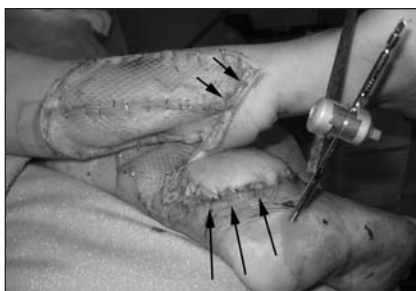


FIG. 2. The sural flap has been raised from the left leg and transferred to the traumatic wound (long arrows). The skin was left over the pedicle (short arrows) for added strength. The legs were immobilized by external fixation.



FIG. 3. Appearance 10 days after pedicle division.

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