Letter to the Editor

Letter to the Editor: Can Sural Fasciocutaneous Flaps Be Effective in Patients Older Than 65?

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To the Editor,

We read the paper "Can Sural Fasciocutaneous Flaps Be Effective in Patients Older Than 65?" [4] with great interest, and we wish to share our experiences with the sural fasciocutaneous flap in the context of the current coronavirus disease 2019 (COVID-19) pandemic.

Most surgical units are facing an acute shortage of resources, including workforce, anesthetic drugs, and operating facilities [1]. Despite the cancellation of elective procedures, orthopaedic surgeons continue to see limb-threatening conditions such as open fractures, severe infections, and fungating tumors [2]. Often, these

patients are older and may have multiple comorbidities, and some may even have an ongoing or recent COVID-19 infection. Some will undergo complex reconstructive procedures. How do we balance their urgent reconstructive needs at a time when resources are scarce?

Flap reconstruction should be reserved for wounds that are not suitable for a skin graft; for example, in patients with exposed implants. Nonessential reconstruction should be deferred in patients who test positive for COVID-19, but may become part of the picture in specific situations such as exposed implants or critical vascular repairs.

Ankle defects are particularly challenging because of limited adjacent soft tissue. In the context of COVID-19, flap reconstructions that can be performed quickly are preferred, rather than more elaborate free flap procedures that may have better functional and aesthetic outcomes but impose a greater strain on surgical resources. The sural fasciocutaneous flap is an ideal choice for resurfacing ankle defects for several reasons. First, "like-for-like" tissue is obtained from the same limb and can be performed under a sciatic or

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popliteal neuraxial block. This minimizes the risk of aerosolization from intubation during general anesthesia in a patient with an active COVID-19 infection [2]. Second, the surgical landmarks of this neurocutaneous flap are consistent and it can be raised quickly (Fig. 1A-C). This minimizes surgical time, which is imperative in the setting of COVID-19. Third, it does not require microsurgical expertise and the procedure can be performed by a single team of surgeons, keeping surgical teams small and minimizing potential nosocomial COVID-19 exposure. Finally, postoperative monitoring is relatively straightforward. After surgery, patients typically convalesce—at least initially—in the prone position, which also reduces the work of breathing in a patient with respiratory compromise [3]. Unlike free flaps, these local flaps do not require high-volume fluid regimens that may be detrimental in the setting of interstitial lung injury. If a fully inset flap shows signs of congestion, it may be returned to its original position at the bedside with the patient under sedation.

This pandemic has forced us to revisit our "peacetime" reconstructive paradigm. The sural fasciocutaneous flap is one such example, in that it allows us to use scarce resources prudently while taking good care of patients with challenging, limb-threatening problems.
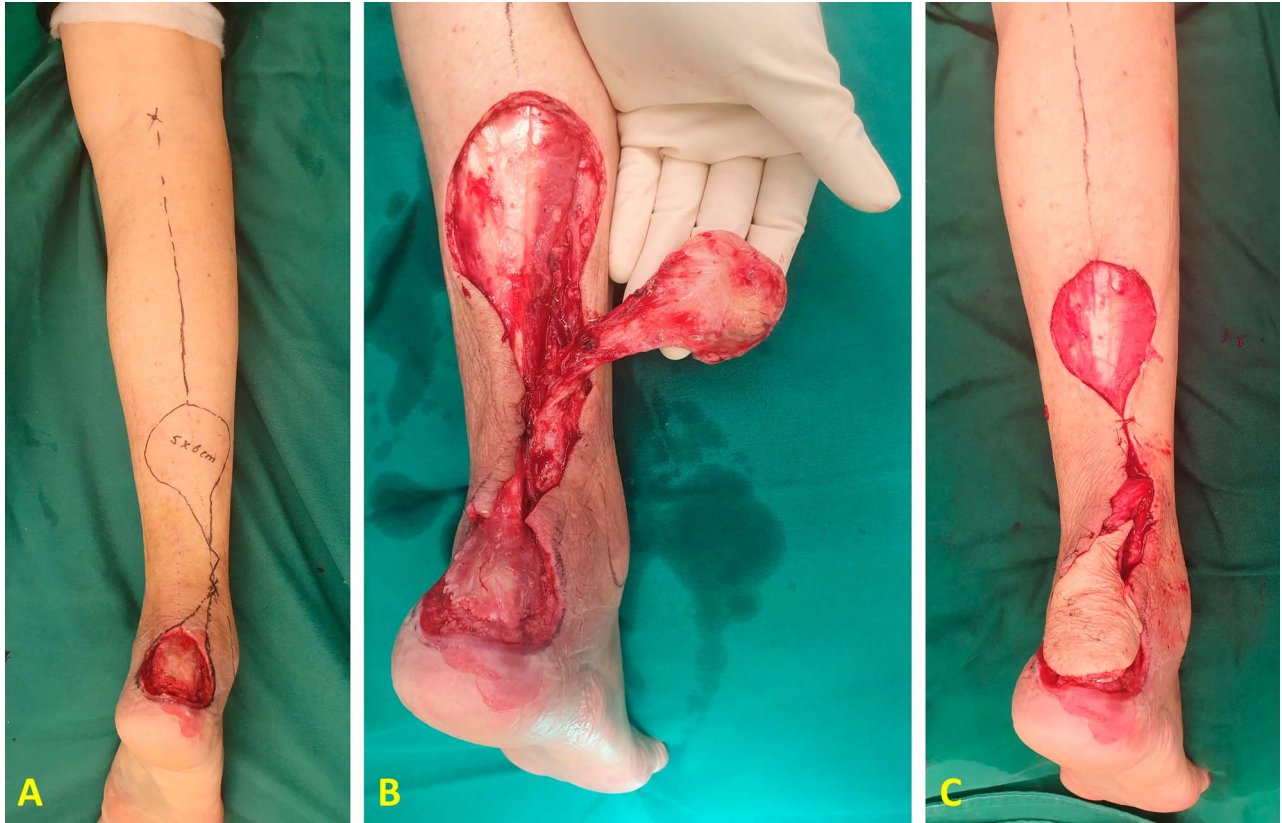
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Fig. 1 (**A**) A 71-year old woman with diabetes and ischemic heart disease presented 1 week after sustaining a displaced, open calcaneal fracture. She had avoided medical treatment earlier because of the imposed "lockdown" measures. (**B**) The fracture was fixed with cannulated screws and a sural fasciocutaneous flap was used to reconstruct the soft-tissue defect. (**C**) The strategies we use to ensure flap survival are: (1) identifying perforators using bedside Doppler, (2) leaving a generous cuff of tissue around the pedicle, (3) avoiding a subcutaneous tunnel, and (4) delaying inset.

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