Experience with the Distally Based Sural Neurofasciocutaneous Flap Supplied by the Terminal Perforator of Peroneal Vessels for Ankle and Foot Reconstruction

Reference:

Scientific Literature Reviews

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Podiatric Relevance:
Complex soft tissue defects in the lower leg, ankle, and heel regions have proven to be challenging problems for the podiatric surgeon and other colleagues in medicine. The use of several procedures has been considered for repair of these soft tissue defects. Distally based sural neurofasciocutaneous flaps supplied by the terminal perforator of the peroneal vessels was assessed in this article.

Methods:
In this article, 15 patients who underwent the procedure of the distally based sural neurofasciocutaneous flap transfers for coverage of soft tissue defects over the foot and malleolus were analyzed. The flap size ranged from 8cm X 9cm to 13cm X 31 cm. The perforator pedicle ranged from 1.6cm to 3.0cm in length. Follow-up was from 2 months to 24 months. Operative technique was discussed in detail within the article.

Results:
13 of 15 flaps survived without complications. In one patient, necrosis of the distal one fifth of the flap occurred. Another patient had necrosis of the distal margin of the flap. All donor sites healed without complication. Four of the cases were then reviewed within the article.

Conclusion:
This article offers another option of a surgical flap procedure for complex soft tissue defects of the foot and ankle. Some disadvantages of the flap discussed are bulkiness and sacrifice of an artery. Yet, the flap is reliable, versatile, and offers an option for larger sized defects.