Practical guidelines for getting the most out of the gastrocnemius muscle flap units: a presented algorithm for the best flap choice

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Abstract:

Although with the reported versatility, vascular reliability, and easy harvesting and elevation of the gastrocnemius muscle flap, still it is used for a narrow aspect of reconstructions including only small and nearby defects. The flap is unfortunately full of limited applications, unreachable coverage, and soft tissue shortage. In this work, we are presenting 20 cases of gastrocnemius muscle flap of different etiologies, in which we applied a group of modifications to have a higher grade of applicability, more arc of rotation, and more tissue surface area. The validity of these modifications was intraoperatively tested in different defect sites and sizes to report if they are really meaningful. All flaps had survived with no complications. We have summarized these modifications in four golden rules, making these muscle flaps more versatile and more applicable. An algorithm is suggested as a leading tool for the best choice of the gastrocnemius muscle units in different situations.

Keywords:

Gastrocnemius . Muscle . Flap . Modifications

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