Beyond Flap Survival: Is Survival Enough? - The Functional Paradox of Geriatric Limb Salvage

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Objectives: Advances in microsurgical reconstruction have expanded lower-extremity limb salvage to elderly patients with significant comorbidities. However, it remains unclear whether technical success translates into meaningful functional benefit and tangible improvements in quality of life for frail patients baseline cognitive impairment and limited rehabilitation capacity.

Methods: We present a case-based analysis of an elderly, multimorbid patient who underwent latissimus dorsi free flap reconstruction for a trimalleolar fracture with associated overlying soft tissue defect. Perioperative variables, hospital course, flap viability, discharge disposition, and functional trajectory were examined.

Results: Durable wound coverage and flap survival were achieved, albeit with prolonged operative time, while course was complicated by development of a hematoma necessitating operative intervention. Although durable soft tissue coverage was achieved, the postoperative course was marked by progressive clinical decline, requiring rehospitalization for hypotension, hypoxia, and worsening cognitive function. The patient became unable to participate in rehabilitation and failed to regain ambulatory or functional independence. He was ultimately transitioned to long-term skilled nursing care, remaining bedbound despite limb salvage.

Conclusions: Our findings demonstrate a disconnect between microsurgical success and patient-centered functional outcomes in geriatric limb salvage. Incorporating rehabilitation potential and functional prognosis into patient selection may improve alignment of reconstructive goals with more realistic recovery expectations.