下肢自由皮瓣重建之術後結果及併發症分析

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Free-Flap Lower Extremity Reconstruction - Case Series For Outcome Analysis

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Purpose:

Reconstruction capability of lower extremities progressed tremendously during the past decade. However the failure and complication rate of free-flap lower extremity reconstruction are relatively higher compared with other area like upper extremity or head and neck free-flap transfer. This retrospective review was designed to identify and assess key variables related to flap failure and postoperative complications.

Materials and Methods:

A single center retrospective review of 32 patients who received lower extremity free-flap reconstruction was conducted at Taipei and Tamsui Mackey memorial hospital during a 5-year period. Primary outcome measures were flap outcome and complication rates, which subdivided into minor complication(i.e.: wound infection, wound dehiscence, etc.) and major complication (partial or total flap loss which were considered to be take-backs). We identified 15 variables through hospital charts and performed univariate analysis to determine the association between the variables and outcomes. Statistical analysis was performed using Fisher's exact, chi-square test and binary logistic regression test.

Results:

A total of 32 patients underwent free tissue transfers for lower extremity reconstruction and met inclusion criteria, from which 1 was excluded. Overall outcome revealed total complication in 10 flaps(31.3%), major complication including perforator or venous thrombosis in 7 flaps (21.8%), total flap loss in 5 flaps(15.6%). Acute traumatic injuries

with free flap reconstruction within 30 days demonstrated lower complication rates compared with free flap reconstruction in chronic traumatic defects(P=0.045). Other factors including osteomyelitis, bone non-union, Gustilo grade, Flap type choice and wound size were not significant predictor factors for postoperative flap outcome and complications.

Conclusion:

Early reconstruction for traumatic wounds may decrease the postoperative complication rate. Flap type choice between muscle flaps and fasciocutaneous flaps all have comparable limb salvage and complication rate, which concluded flap selection should be guided individually and specifically.