ORIGINAL ARTICLE

Outcomes of Free Flap Reconstruction in Patients Older Than 75 Years

Jun-Wei Wu[1]; Daniel Sato[1,3]; Kenji Yang[1,2]; Jun-Wei Lai[3]; Chih-Hao Moreno[2,4]

[1] Department of Dermatology, Northshore General Hospital, Example City

[2] Harbor Institute of Clinical Research, Port Example

[3] Department of Rehabilitation Medicine, Riverside Medical Center, Sample County

[4] Division of Plastic and Reconstructive Surgery, Northshore General Hospital, Example City

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Abstract

Background: The optimal approach to free flap reconstruction in patients older than 75 years remains debated, and evidence from routine clinical practice is limited.
Objective: To compare flap survival between the age ≥ 75 years group and the age < 75 years group.
Methods: This study included 260 patients who underwent free tissue transfer treated at two fictional teaching hospitals. The primary outcome was flap survival. Groups were compared using appropriate parametric and non-parametric tests.
Results: Flap survival, n (%) was 46 (95.8) in the age ≥ 75 years group and 205 (96.7) in the age < 75 years group (p = 0.67). Medical complication, n (%) also differed between groups (12 (25.0) vs. 28 (13.2)).
Conclusion: In this sample, age ≥ 75 years was associated with favourable results. Prospective studies are needed to confirm these findings. *(All data in this article are fictional and for template demonstration only.)*
Keywords: free flap; elderly; microsurgery; reconstruction; outcomes

Introduction

Free flap reconstruction in patients older than 75 years is a common clinical question in daily practice1,2. Variation between centres is considerable, and published series often include small numbers of patients3.

Previous reports suggest that outcomes may depend on patient selection, perioperative care and follow-up protocols4,5. The aim of this study was to compare flap survival between the age ≥ 75 years group and the age < 75 years group.

Materials and Methods

We reviewed 260 patients who underwent free tissue transfer between January 2022 and December 2024. Patients were divided into two groups: age ≥ 75 years (n = 48) and age < 75 years (n = 212). The study was approved by the institutional review board (fictional approval no. EX-2025-001).

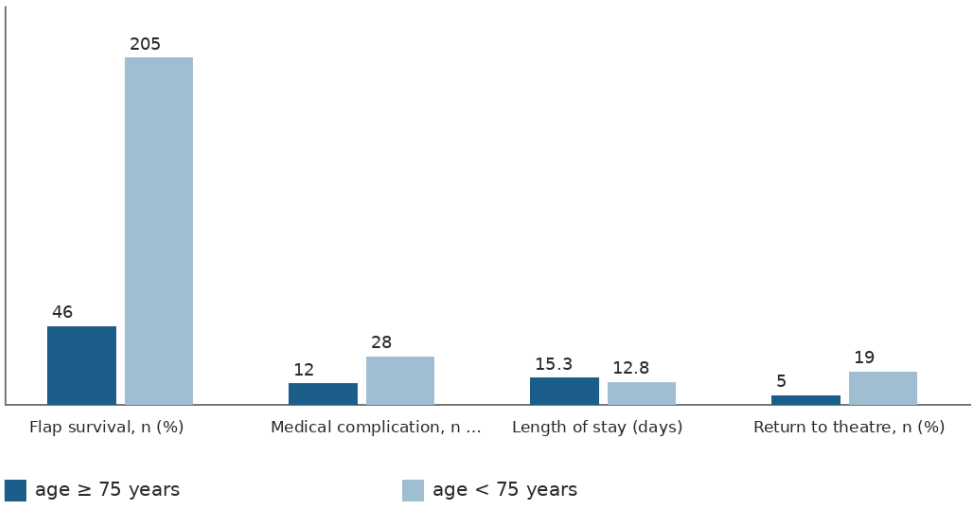
The primary outcome was flap survival. Secondary outcomes are listed in Table 1. Continuous variables are presented as mean ± standard deviation and compared with Student's t-test; categorical variables were compared with the chi-square or Fisher's exact test. A p value below 0.05 was considered significant.

Results

Baseline characteristics were comparable between groups. Flap survival, n (%) was 46 (95.8) in the age ≥ 75 years group and 205 (96.7) in the age < 75 years group (p = 0.67; Table 1, Figure 1).

Table 1. Outcomes by group

Figure 1 Fictional data



Discussion

In this cohort, the age ≥ 75 years group showed better results for several outcomes. These findings are in line with earlier reports5,6, although differences in definitions make direct comparison difficult7.

This study has limitations. It was retrospective, performed at two centres, and unmeasured confounders may have influenced the results. Larger prospective studies are warranted.

Conclusion

Age ≥ 75 years was associated with improved flap survival in this fictional sample. The approach appears safe and may be considered in routine practice8.

References

Moreno A, Tsai B, et al. Example reference 1 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2025;26:60-386.

Chen A, Liu B, et al. Example reference 2 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2017;20:60-307.

Walker A, Lai B, et al. Example reference 3 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2017;37:224-419.

Wu A, Moreno B, et al. Example reference 4 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2024;29:209-514.

Huang A, Haddad B, et al. Example reference 5 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2016;19:49-318.

Huang A, Chang B, et al. Example reference 6 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2023;34:185-379.

Sato A, Tanaka B, et al. Example reference 7 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2017;39:33-398.

Chen A, Wu B, et al. Example reference 8 on free flap reconstruction in patients older than 75 years. *Sample J Med*. 2020;25:294-362.