

Two-year mortality in elderly free flap patients: a case-control study

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Objectives

1. To assess the safety of free flap surgery in an elderly population
2. To ascertain long-term survival rates after free flap surgery in elderly patients.

Background

As the US population ages, surgeons will be faced with the care of octogenarians and nonagenarians for head and neck cancer at an increasing rate. Many of these lesions are surgically resectable cases requiring complex reconstruction. The ability to tolerate extensive oncologic surgeries and reconstructions is a primary question of patients and their families, especially in the elderly population.

Methods

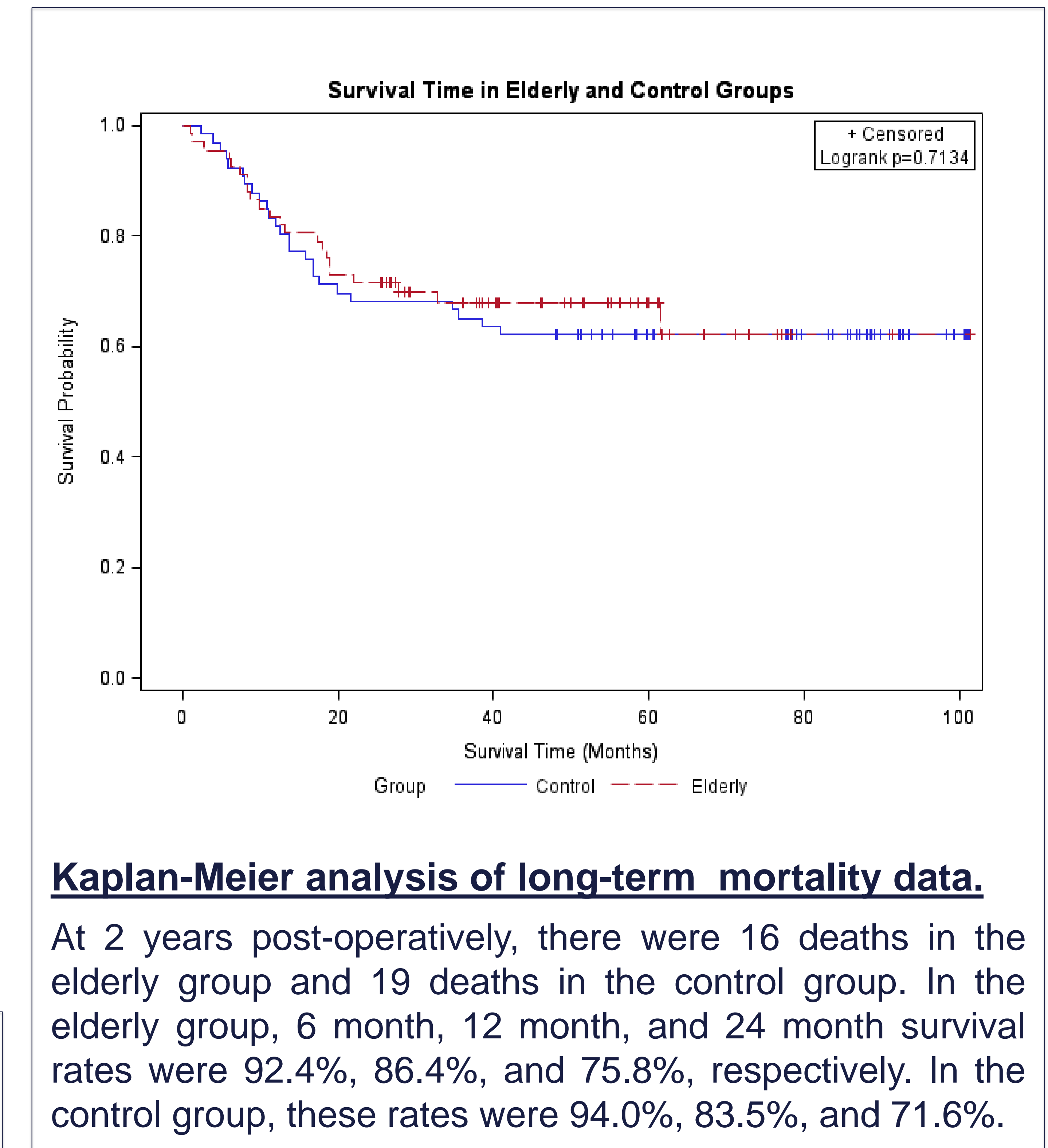
Retrospective case-control study.

A consecutive cohort of patients over 80 years old undergoing free flap reconstruction for head and neck disease was identified at a major academic institution. A control group, matched by reconstruction type, was selected from younger patients undergoing free flap reconstruction at the same hospital during the same time period. Data were collected regarding hospital stay, 30-day mortality, and long-term mortality over no less than a 2-year followup. In addition, data were collected regarding disposition after discharge. Overall mortality in both cohorts was compared using Kaplan-Meier analysis.

Results

Sixty-seven elderly patients were identified and matched with younger controls. Median age in the elderly group was 84 (Range: 80-94) and median age in the control group was 61 (Range: 29-79). These age groups were statistically significantly different by Mann-Whitney analysis. Length of stay was not statistically significantly different between cohorts. Significantly higher proportion of elderly patients required rehab or nursing home stays after hospitalization ($p=0.0001$). There was one peri-operative mortality in the elderly group and none in the control group. By 2-years post-procedure, there were 16 deaths in the elderly group compared to 19 deaths in the control group. Using Kaplan-Meier analysis, there was no significant difference in mortality rates between elderly and control cohorts ($p=0.71$).

	Age ≥80	Control	
Number of Cases	67	67	
Flap Failures	3	3	
Mortality	1	0	
Length of stay (days)	11.2	10.0	$p = 0.198$
Patients with significant post-op complications	21 (32%)	25 (38%)	$p = 0.58$
• Flap complication (wound dehiscence, hematoma, e.g.)	9	8	
• Medical complications	17	13	
Discharged to home	18 (27%)	53 (80%)	$p = 0.0001$



Conclusions

With an aging population, head and neck cancer in very elderly patients is on the rise. Many lesions are appropriate for surgical resection with free flap reconstruction, but some surgeons hesitate to offer such extensive surgery to patients over 80 years old. Our data suggest that elderly patients are more likely to be discharged to a rehab facility after surgery; however, appropriately-selected elderly patients have comparable long-term survival outcomes after free flap surgery as compared to younger controls.