

Hospital readmission after head and neck microvascular reconstruction

Unplanned readmissions are associated with decreased healthcare quality and increased costs. This nationwide study examines causes for unplanned readmission among head and neck cancer patients undergoing immediate microsurgical reconstruction.

Patients undergoing head and neck tumor resection with microsurgical reconstruction were identified in the 2011-2014 National Surgical Quality Improvement Program database. Clinical characteristics and complications were compared among patients who did and did not undergo unplanned readmission. Univariate and multivariate logistic regression analyses were performed.

Database search revealed 1,063 patients, 94 (8.8%) of whom had unplanned readmissions. Readmitted patients had significantly higher ASA scores (14.9% vs.7.3% ASA class 4 patients; $P = 0.03$) and significantly higher rates of disseminated cancer (14.9% vs.7.1%; $P = 0.01$), laryngopharyngectomy (17.0% vs.6.9%; $P = 0.0005$), deep wound infection (22.3% vs.2.4%; $P < 0.0001$), wound dehiscence (19.1% vs.3.3%; $P < 0.0001$), and blood transfusion within 72 h of surgery (44.7% vs.32.6%; $P = 0.02$). Multivariate logistic regression revealed deep wound infection ($OR = 8.65$, $P < 0.0001$) and wound dehiscence ($OR = 3.69$, $P = 0.0004$) to be independent predictors of unplanned readmission.

Deep wound infection and wound dehiscence were independent predictors of unplanned readmission among head and neck cancer patients undergoing immediate microsurgical reconstruction. Institutions should focus efforts on improving wound surveillance, outpatient strategies for wound care, and optimization of discharge planning for this complex patient population.

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[Risk factors for unplanned readmission following head and neck microvascular reconstruction: Results from the National Surgical Quality Improvement Program, 2011-2014.](#)

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