The Effect of Depression on Short-term Outcomes and Cost of Care after Head and Neck Cancer Surgery

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ABSTRACT

Background: Depression is common in head and neck cancer (HNCA) patients and is associated with swallowing impairment, diminished quality of life, and increased risk of poor survival. We sought to determine if depression impacted in-hospital mortality, complications, length of hospitalization and costs in HNCA surgery.

Study Design: Retrospective cross-sectional study.

Methods: Discharge data from the Nationwide Inpatient Sample for 123,662 patients who underwent an ablative procedure for a malignant oral cavity, laryngeal, hypopharyngeal or oropharyngeal neoplasm in 2001-2008 was analyzed using cross-tabulations and multivariate regression modeling.

Results: Overall, 123,662 patients underwent surgery in 2001-2008 with depression reported in 5,224 cases (4%). Patients with depression were significantly more likely to be female (OR=1.8, P<0.001), have advanced comorbidity (OR=2.0, P<0.001), laryngeal primary site disease (OR=1.2, P=0.024), a history of alcohol abuse (OR=1.6, P<0.001), and dysphagia (OR=1.4, P=0.007), but were less likely to be elderly (OR=0.7, P=0.019) and reside in the south (OR=0.7, P=0.002). Weight loss and alcohol abuse were significantly associated with an increase in postoperative complications, length of hospitalization, and costs, after controlling for all other variables. No significant interactions were found between depression and dysphagia, weight loss, or alcohol abuse. Depression was not associated with in-hospital mortality, acute medical complications, surgical complications, or hospital-related costs, but was associated with a mean increase in length of hospitalization of 24 hours (P<0.001).

Conclusions: Depression in HNCA surgical patients is significantly associated with dysphagia and alcohol abuse and may be a marker for patients at increased risk of poor short-term outcomes. Aggressive preventative identification and treatment of depression, dysphagia and alcohol abuse may reduce morbidity and mortality in high-risk patients.

REFERENCES