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Unintentional Weight Loss is Associated with Higher Risk of Mortality Among Patients Undergoing Surgery for Distal Radius Fractures

INTRODUCTION

Unintentional weight loss may be a sign of chronic disease, malnourishment, and/or other pathology. This study sought to assess the relationship between unintentional weight loss and 30-day mortality among patients who received ORIF for distal radius fracture (DRF).

METHODS

A retrospective cohort study using NSQIP was performed involving patients who underwent ORIF for DRF between 2012 and 2020. The primary exposure, unintentional weight, was defined as >10% loss of body weight within 6-months preceding the surgical procedure. Patients with and without unintentional weight loss were assigned to two different cohorts. Potential confounders were basic demographics, baseline health status, and surgical characteristics. Inclusion criteria was age <18 years. Univariate analyses employed chi-square testing to assess for cohort differences. Multivariable regression analysis adjusting for potential confounders was performed to assess unintentional weight loss as a risk factor for 30-day mortality.

RESULTS

28,685 patients received ORIF for DRF, of which 57 had unintentional weight loss. The highest proportion of patients in both cohorts had female sex, white race, non-Hispanic ethnicity, independent functional status, normal weight, non-smoking status and no diabetes. Also, most patients in both cohorts were admitted from home, received surgery on an elective basis, in an outpatient setting, and received general anesthesia. Patients with versus without unintentional weight loss had older age and higher ASA classification. On multivariable regression analysis adjusting for potential confounders, patients with versus without unintentional weight loss had 8.12 times higher odds of 30-day mortality.

CONCLUSION

Patients with compared to those without unintentional weight loss who undergo ORIF for DRF have a higher risk of mortality following surgery. Further studies into possible medical optimization strategies, may help to reduce mortality risks.