Negative margins, lymph node yields predict survival

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(HealthDay)—Patients treated at hospitals that attain a high rate of negative margins and lymph node yields (LNY) of at least 18 have improved survival after surgery for head and neck squamous cell carcinomas (HNSCC), according to a study published online Oct. 5 in *JAMA Otolaryngology—Head & Neck Surgery*.

David W. Schoppy, M.D., Ph.D., from Stanford University in Palo Alto, California, and colleagues retrospectively reviewed records from the National Cancer Database to identify patients who underwent primary surgery and concurrent neck dissection for HNSCC between 2004 and 2013. They aimed to determine whether the percentage of patients with negative margins on primary resection and an LNY of 18 or more would predict outcomes.

The researchers identified 1,008 hospitals where 64,738 patients (69.8 percent male; mean age, 60.5) met inclusion criteria. Patients treated at hospitals attaining the combined metric of a 90 percent or higher negative margin rate and at least 80 percent of cases achieving LNY of 18 or more experienced a significant reduction in mortality (hazard ratio [HR], 0.93). This survival benefit was seen independent of patient-level improvement associated with negative margins (HR, 0.73) and LNY of 18 or more (HR, 0.85). The association of traditional measures of hospital quality (volume and teaching status) was neutralized when these metrics were included in a model.

"Tracking of these metrics may help identify high-quality centers and provide guidance for institution-level quality improvement," conclude the authors.

More information: Abstract/Full Text (subscription or payment may be required)