Combination chemo-radiation therapy may help preserve larynx for patients with laryngeal cancer

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In a study published online by *JAMA Otolaryngology-Head & Neck Surgery*, James A. Bonner, M.D., of the University of Alabama at Birmingham, and colleagues assessed the rates of laryngeal (having to do with the larynx [voice box]) preservation and laryngectomy-free survival in patients receiving the monoclonal antibody cetuximab and radiation therapy (CRT) or radiation therapy alone.

Historically, locoregionally advanced squamous cell cancers of the larynx or hypopharynx have been treated with surgical resection, usually involving laryngectomy with or without postoperative radiotherapy. Although laryngectomy is an effective treatment, investigators have sought therapeutic strategies that result in voice preservation. After the realization that many patients could avoid total laryngectomy with the use of primary radiotherapy, several combination chemoradiotherapy strategies were introduced for patients with laryngeal or hypopharyngeal cancers.

This study consisted of a secondary subgroup analysis of patients who were enrolled in a randomized, phase 3 study from 73 centers in the United States and 14 other countries. Of the 424 patients included in the trial, 168 treated patients with cancer of the larynx or hypopharynx were included in the subgroup analysis (90 in the CRT group and 78 in the radiotherapy alone group). The rates of laryngeal preservation at 2 years were 88 percent for CRT vs 86 percent for radiotherapy alone. This

study was not powered to assess organ preservation. Median overall survival was 27 vs 21 months for the CRT and radiotherapy alone groups, respectively. There was a 4 percent and 8.9 percent absolute improvement in laryngectomy-free survival at 2 and 3 years, respectively, for CRT vs radiotherapy alone. No differences between treatments were reported regarding overall quality of life, need for a feeding tube, or speech.

"The higher rate of laryngeal preservation that was achieved with the use of CRT compared with radiotherapy alone was encouraging," the authors write. "These results need to be interpreted in the context of a retrospective subset analysis with limited sample size."

"This treatment approach warrants further evaluation in larger populations to fully assess the potential value of cetuximab or other molecular targeting agents to augment laryngeal preservation rates."

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