

School of Medicine at

Mount Sinai

DEPARTMENT OF OTOLARYNGOLOGY HEAD AND NECK SURGERY

PATIENT SPOTLIGHT

Transoral Midline Mandibulotomy Allows Laryngeal Access for Transoral Resection of Recurrent Laryngeal Cancer





Midline Mandibular Osteotomy Allowing for Enhanced Laryngeal Access

Recurrent laryngeal squamous cell carcinoma after primary radiotherapy continues to challenge head and neck surgeons. The patient illustrated above had received primary radiotherapy for a T1bNOMO glottic cancer and while the majority of these will be cured with radiation, this particular lesion did not respond. At this point traditional surgical resection for salvage would include transoral CO2 laser resection and he was referred to the laryngology service for consultation. Unfortunately on examination in the operating room it was noted that his laryngeal access was inadequate with suspension laryngoscopy to safely resect the anterior margin of the recurrence.



ENT and Allergy Associates, LLP

This patient was referred by a tri-state ENTA physician.

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Before (left) and and after (right) mandibular osteotomy. Note the improved laryngeal access allowing increased visualization of the anterior commissure

SURGICAL MANAGEMENT

Due to poor access after radiation therapy the patient was not a candidate for traditional transoral CO2 laser resection and was faced with the prospect of traditional open partial laryngeal surgery and a tracheostomy. Because he was a teacher he wished to explore all options regarding his therapy, a novel technique was employed utilizing a midline transoral mandibular osteotomy. This allowed the laryngoscope to obtain a more anterior position and improved access for CO2 laser resection. The patient was consented and the procedure performed without incident. Negative margin resections were achieved and the patient continues to do well under our surveillance program.

MIDLINE MANDIBULAR OSTEOTOMY

While this technique is certainly rarely indicated in the salvage setting, it does provide some unique advantages and in this case, allowed the patient to undergo salvage surgery for laryngeal cancer without traditional partial laryngeal surgery and tracheostomy. This allowed him to return to his teaching career within a week with an excellent voice outcome as one would expect with transoral laser resection. Risks to mandibular osteotomy include hardware infection, loss of dentition, and malocclusion and appropriate fixation principles must be respected if this technique is considered.



By Brett A. Miles, MD, DDS, FACS

Dr. Miles is part of the Multidisciplinary Head and Neck Surgery Center as a staff surgeon and oncologist. His clinical interests include oncologic head and neck surgery, reconstructive surgery and oral/maxillofacial surgery/trauma.

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