

Clinical Image

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Epiglottic squamous cell carcinoma

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A 56 year old woman with history of epiglottic squamous cell cancer (SCC), chronic obstructive pulmonary disease (COPD), requiring 4 L O₂ supplementation, asthma, coronary artery disease, myocardial infarction, gastroesophageal reflux disease, dysphagia, and tobacco abuse presented for laparoscopic jejunostomy tube placement to supplement nutritional intake during radiation therapy. Less than one month prior to presentation, she underwent awake intubation utilizing video laryngoscopy with a full view of the glottis. A computed tomography scan of the neck demonstrated a 3.1 × 1.8 cm epiglottic mass (Image A) and nasolaryngoscopy revealed a mass on the epiglottis to the mid-laryngeal surface without obstruction of the glottis. Given the patient's reassuring nasolaryngoscopy examination and prior successful intubation, intubation for the jejunostomy tube placement was performed utilizing video laryngoscopy. After induction, easy bag-mask ventilation was confirmed before succinylcholine, a short-acting neuromuscular blocker, was given to optimize intubating conditions. Using a Glidescope® LoPro video laryngoscope (Verathon Inc.), the mass was visualized to be partially obstructing the laryngeal inlet (Image B); however, intubation went without complication. On postoperative day 4, the patient stated that she no longer wanted to move forward with radiation therapy as she felt that she was experiencing significant weakness. At that time, the patient changed her code status to Do-Not-Resuscitate Comfort Care and elected hospice care. Unfortunately, the patient expired on postoperative day 5.

SCC is the most common malignancy in the head and neck [1, 2]. Alcohol and tobacco abuse are the most prevalent risk factors, contributing to approximately 75–85% of cases [3]. Human papilloma virus (HPV) infection, primarily HPV-16, is a growing cause of head and neck SCC,

specifically oropharyngeal cancer with the prevalence of HPV-positive oropharyngeal SCC in Europe increasing to 50% recently and North America plateauing at approximately 65% in the last decade [3, 4]. Presenting symptoms for laryngeal SCC include dysphagia, dysphonia, referred otalgia, and neck mass [5]. More advanced tumors may present with airway compromise due to obstruction [5].



Image A: CT neck (axial view) demonstrates the presence of an epiglottic mass (denoted by the red arrow).



Image B: Video laryngoscopy of the patient's airway demonstrated an epiglottic mass partially obstructing the view of the glottic opening.

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Prevalent comorbidities at diagnosis often include hypertension, hyperlipidemia, COPD, and diabetes [6]. Treatment options for laryngeal cancer are determined by subsite, stage, and pathologic findings [7]. Early stage laryngeal cancers may be treated with surgery or radiation while advanced stage laryngeal cancers require combined modality therapy with either chemoradiation or surgery and adjuvant radiation [7, 8]. As demonstrated in this case, pathologies that can distort the airway must be considered to ensure proper airway management.

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