Transoral Laser Microsurgical Resection of a Retropharyngeal Cyst

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Introduction
- Background: Transoral laser microsurgery (TLM) has become an accepted and preferable technique to resect cancers of the oropharynx and larynx.
- Objective: The authors aim to review the presentation, evaluation, and treatment of a benign head and neck bronchogenic cyst and demonstrate a transoral laser technique for excision of retropharyngeal lesions.
- Methods: Retrospective review of an adult patient undergoing TLM excision of a benign retropharyngeal cyst. Our approach is compared to the traditional open techniques reported in the literature.

Operative Technique
- A Feyh-Kastenbauer retractor was used to expose the oropharynx.
- A vertical 6 cm incision was placed in the posterior pharynx.
- The laser was used to divide the constrictors.
  - The cyst was immediately encountered (Figure 2A).
- Dissection was tedious and employed the laser (1 watt continuous), Bellucci scissors, and endoscopic bipolar.
  - Once the superior pole was mobilized, the lesion was shelled out inferiorly.
- Lateral dissection encountered parapharyngeal fat and required meticulous hemostasis of the multiple venules.
- After excision, the wound was closed primarily (Figure 2B).

Discussion
- Transoral laser and transoral robotic surgery continue to expand their domain in head and neck surgery.
- TLM has been used to remove known retropharyngeal lymph nodes at the time of primary resection.1
- Retropharyngeal bronchogenic cysts are rare and have only been described once.2
  - These lesions are congenital, and many are asymptomatic until they become infected or cause compression.
- Classical approaches to the parapharynx include:
  - Trans-parotid
  - Transcervical
  - Mandibular swing approaches
- Transoral approach advantages:
  - A more direct approach
  - Minimally invasive
  - No external scars
  - No need for drains
  - Decreased hospital duration
- Transoral approach disadvantages:
  - Limited exposure
  - Unfamiliar approach and anatomy
  - Potential for great vessel bleeding
  - Possible facial nerve injury
  - Possible recurrence if incomplete resection
- Image guidance is helpful and should be considered for large or revision cases
- Extensive review of pre-operative imaging is imperative for surgical planning
- This patient was evaluated seven years after surgery and found to be doing well with full pharynx function and no recurrence.

Considerations
- A 45 year old female with shown metastatic thyroid cancer (Figure 3).
  - What approach would you use?
  - We elected an open approach because of carotid proximity and scar tissue from previous dissection.
  - We obtained a CT angiogram to rule out carotid aneurysm.

References