



Introduction

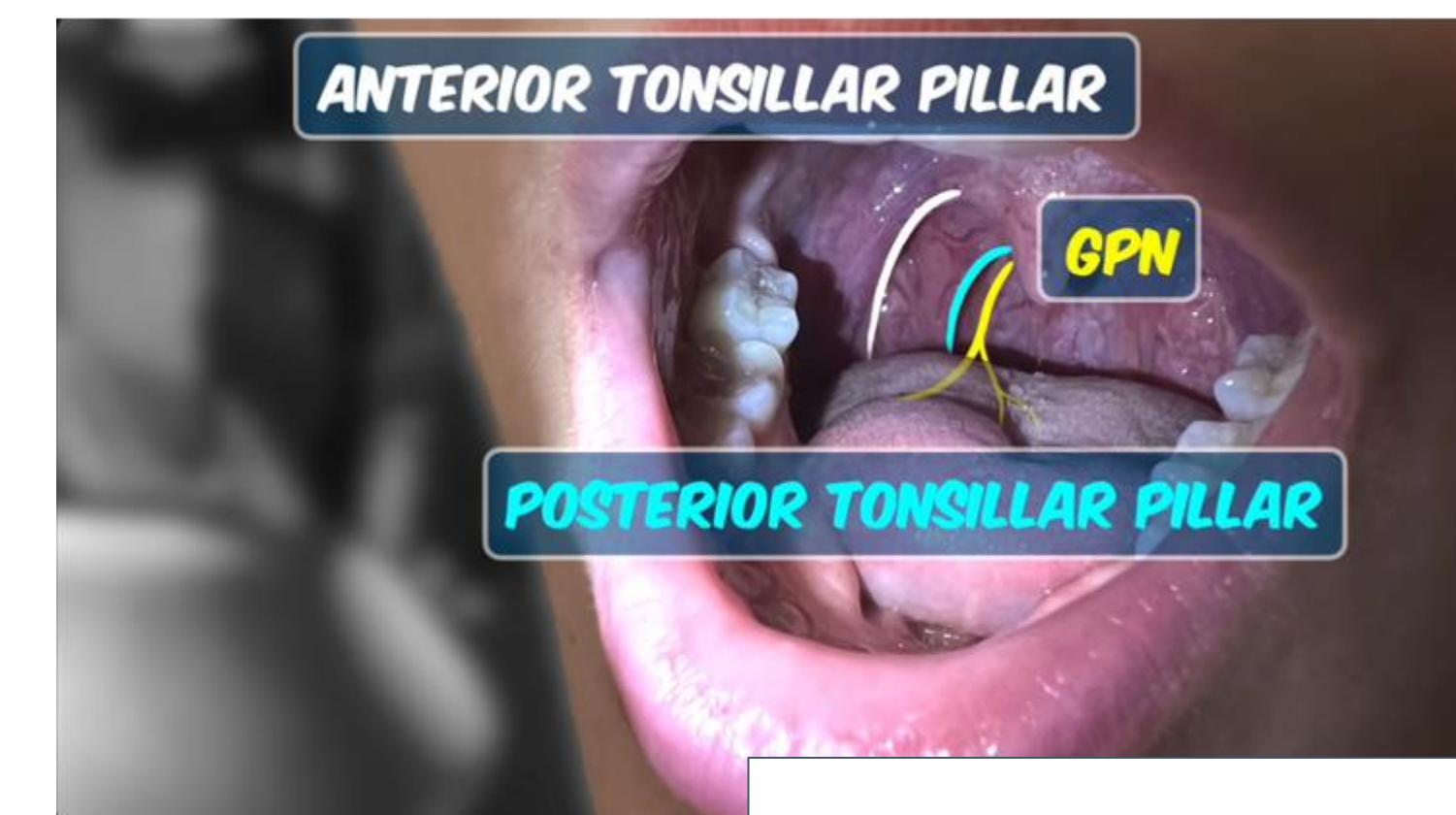
Current guidelines emphasize awake intubations for suspected difficult airways. In this case, ultrasound-guided and laryngoscope-guided airway nerve blocks were used to facilitate successful awake flexible scope intubations in a patient with a large airway mass.

Results/Case Report

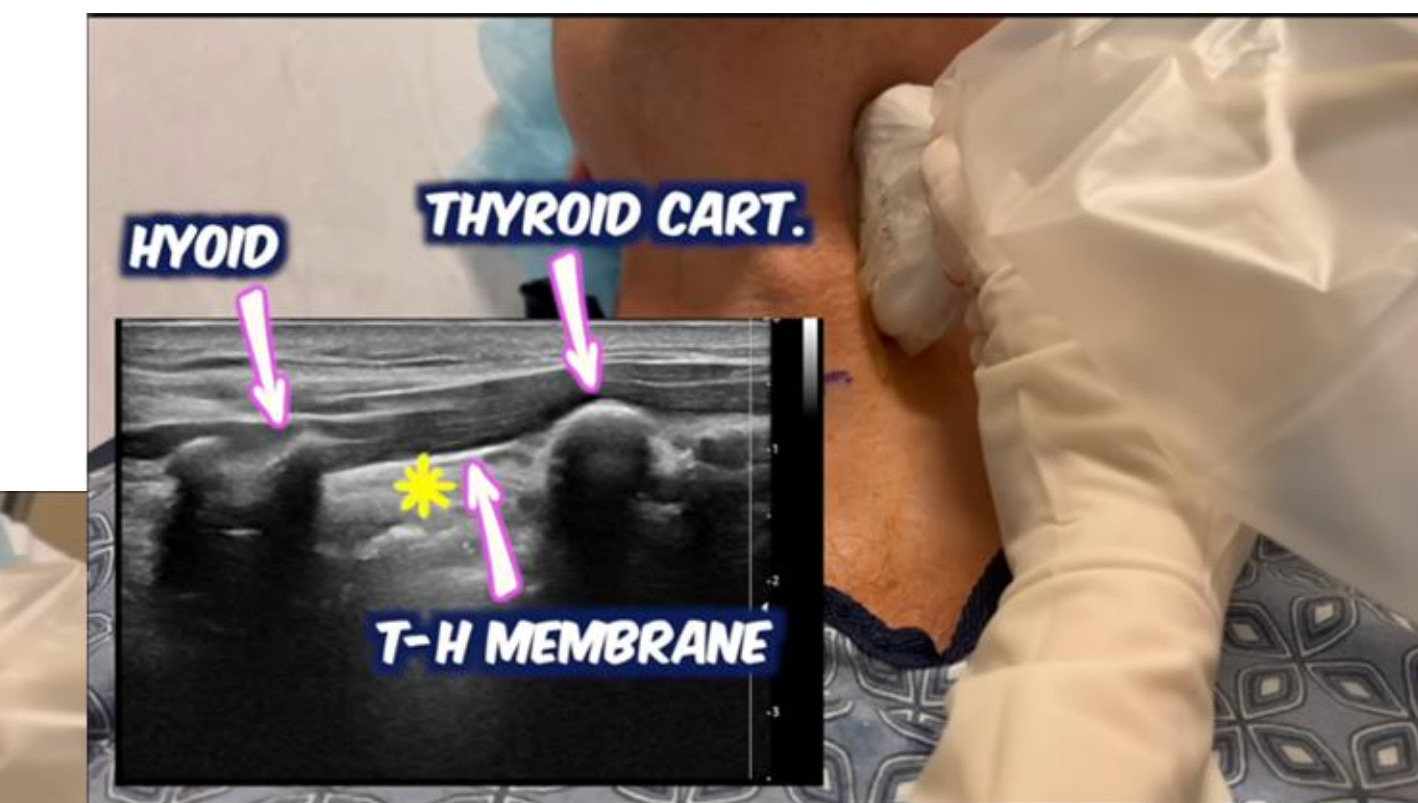
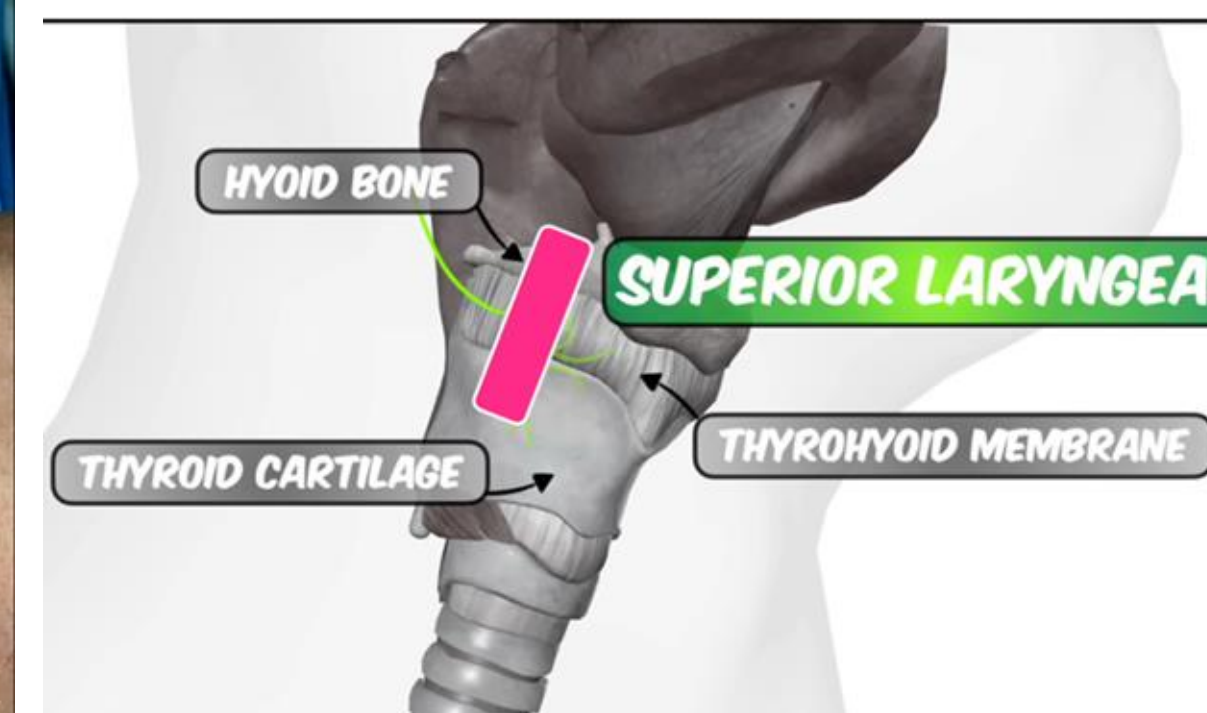
A 57-year-old male with no known past medical history, without medical care for over 20 years, presented with a visibly enlarged anterior neck mass and progressively worsening SOB. Examination revealed bilateral multinodular thyroid enlargement, more pronounced on the right side, causing supraglottic airway narrowing.

An awake flexible scope nasal intubation was planned with airway nerve blocks as the primary anesthetic. Bilateral glossopharyngeal, superior laryngeal (SLN), and recurrent laryngeal nerve (RLN) blocks were performed using 2% lidocaine with epinephrine 1:200,000 targeted with 3cc, 3cc, and 5cc, respectively. Minimal sedation was provided with 2mg of midazolam.

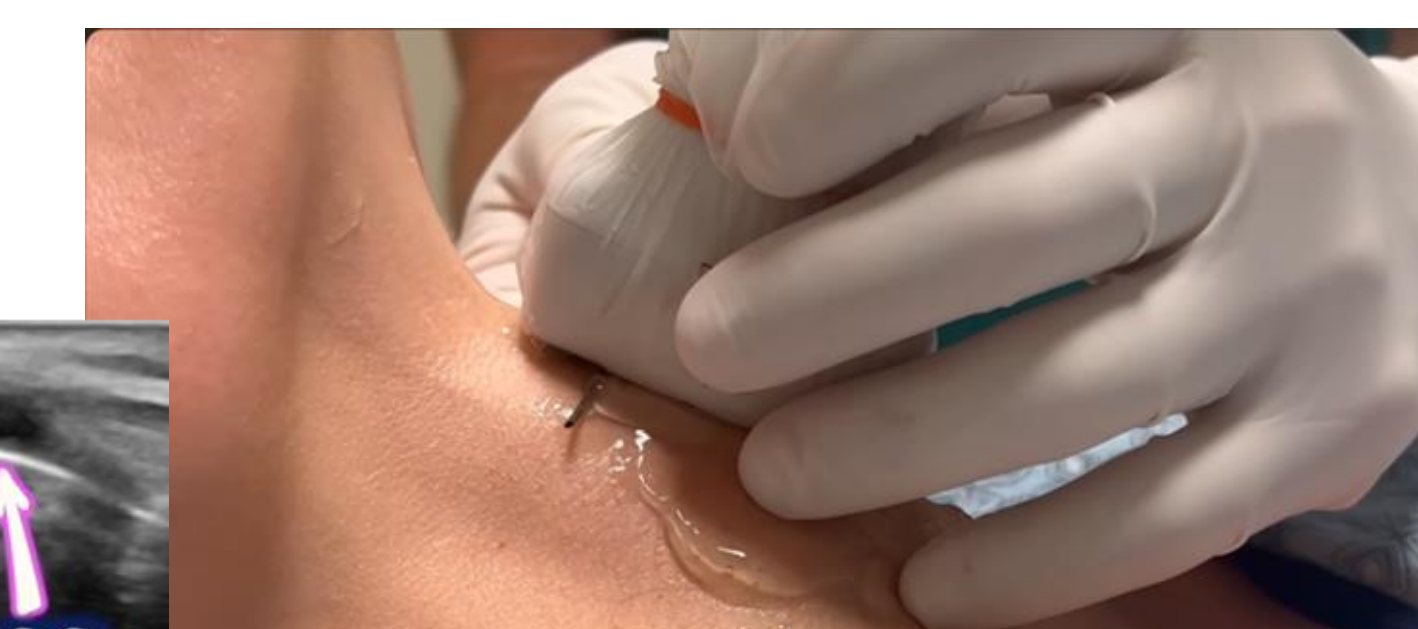
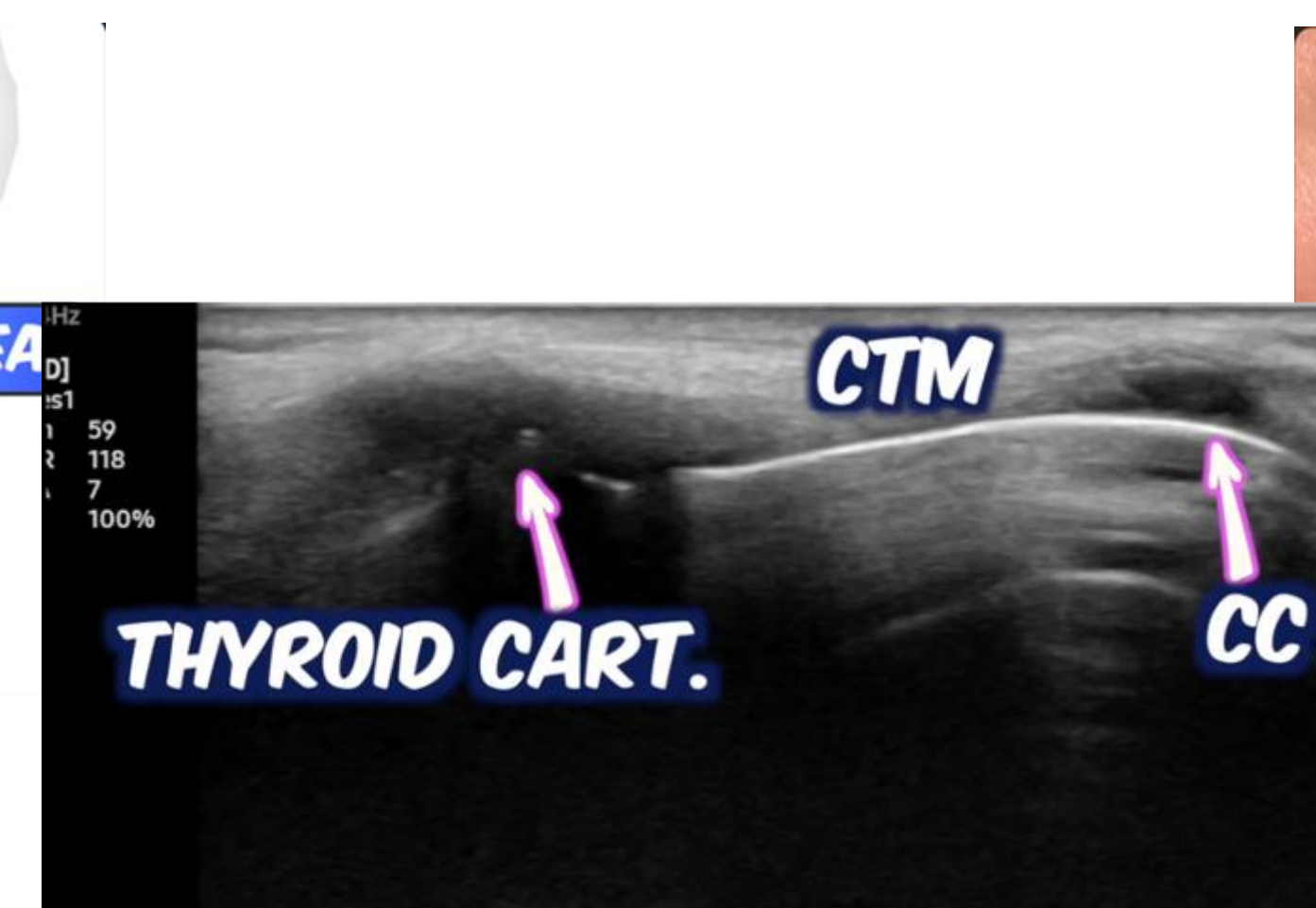
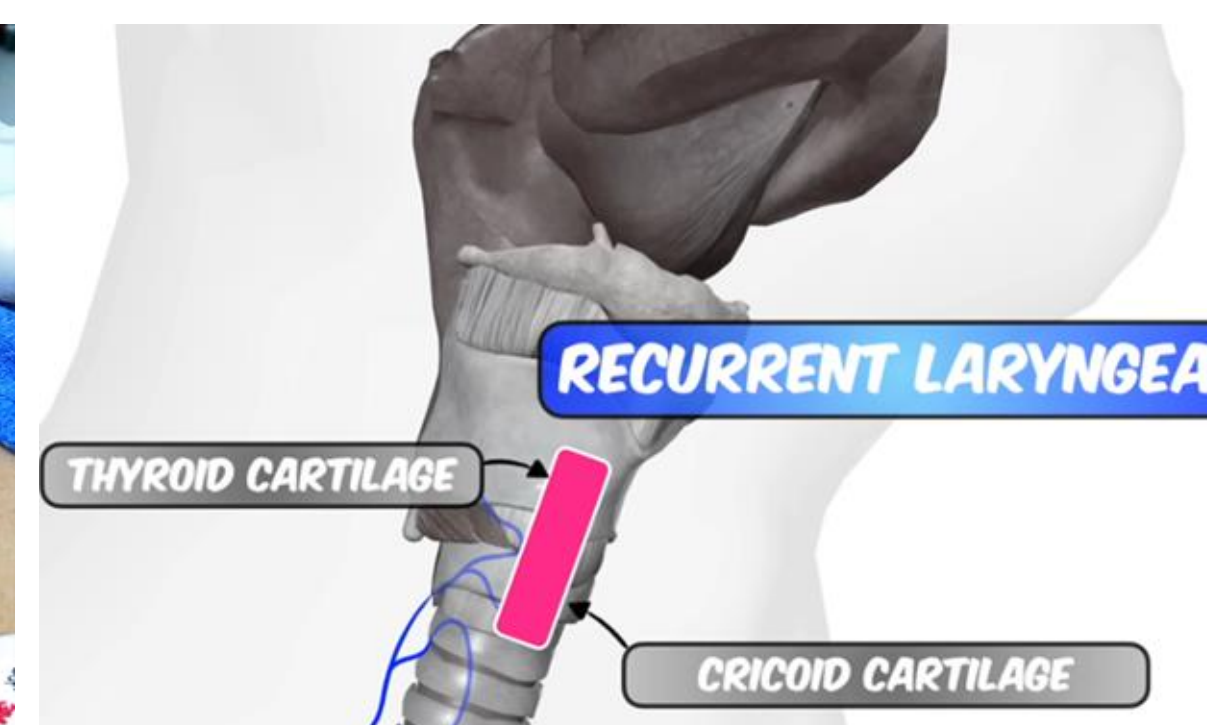
Planned awake nasal intubation was then completed on a single, atraumatic attempt with minimal patient discomfort or anxiety.



Glossopharyngeal block



Superior Laryngeal block



Recurrent Laryngeal block

For the **glossopharyngeal blocks**, a tongue depressor was used to **sweep the posterolateral tongue**, exposing the palatine tonsil between anterior and posterior tonsillar pillars. A **22-gauge spinal needle was advanced approximately 1 cm into the submucosal layer** at the caudal aspect **posterior to the anterior tonsillar pillar**.

The **ultrasound-guided SLN block** was performed in the sagittal plane **between the hyoid bone and thyroid cartilage**, with a **25-gauge needle advanced through the thyrohyoid membrane**.

The **RLN block** was achieved via **ultrasound-guided transtracheal injection through the cricothyroid membrane**.

Discussion

Airway blocks can reduce intubation time and decrease complications during awake tracheal intubation. Although generally low risk, complications include headache, dizziness, and nausea. Careful aspiration for blood and cerebrospinal fluid is essential, particularly during glossopharyngeal nerve blocks. This case supports growing evidence favoring utility of airway blocks and underscores the need for standardized techniques to improve training, safety, and patient outcomes.

