

Beyond Horner’s Syndrome: A Rare Case of Post-Stellate Ganglion Block Dysphagia, Aphonia, Migraine, and Retroorbital Pain



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INTRODUCTION

- Complex Regional Pain Syndrome (CRPS) is a term used to describe pain and inflammation that can develop following an injury, trauma, or surgery.
- If CRPS affects the upper extremities, a stellate ganglion block (SGB) can offer some relief.
- While SGB is generally a safe procedure when performed with ultrasound/fluoroscopic guidance, complications ranging from temporary hoarseness to hematomas and airway compromise can occur (1).
- We share a rare case involving nausea, aphonia, dysphagia and migraine post-SGB.

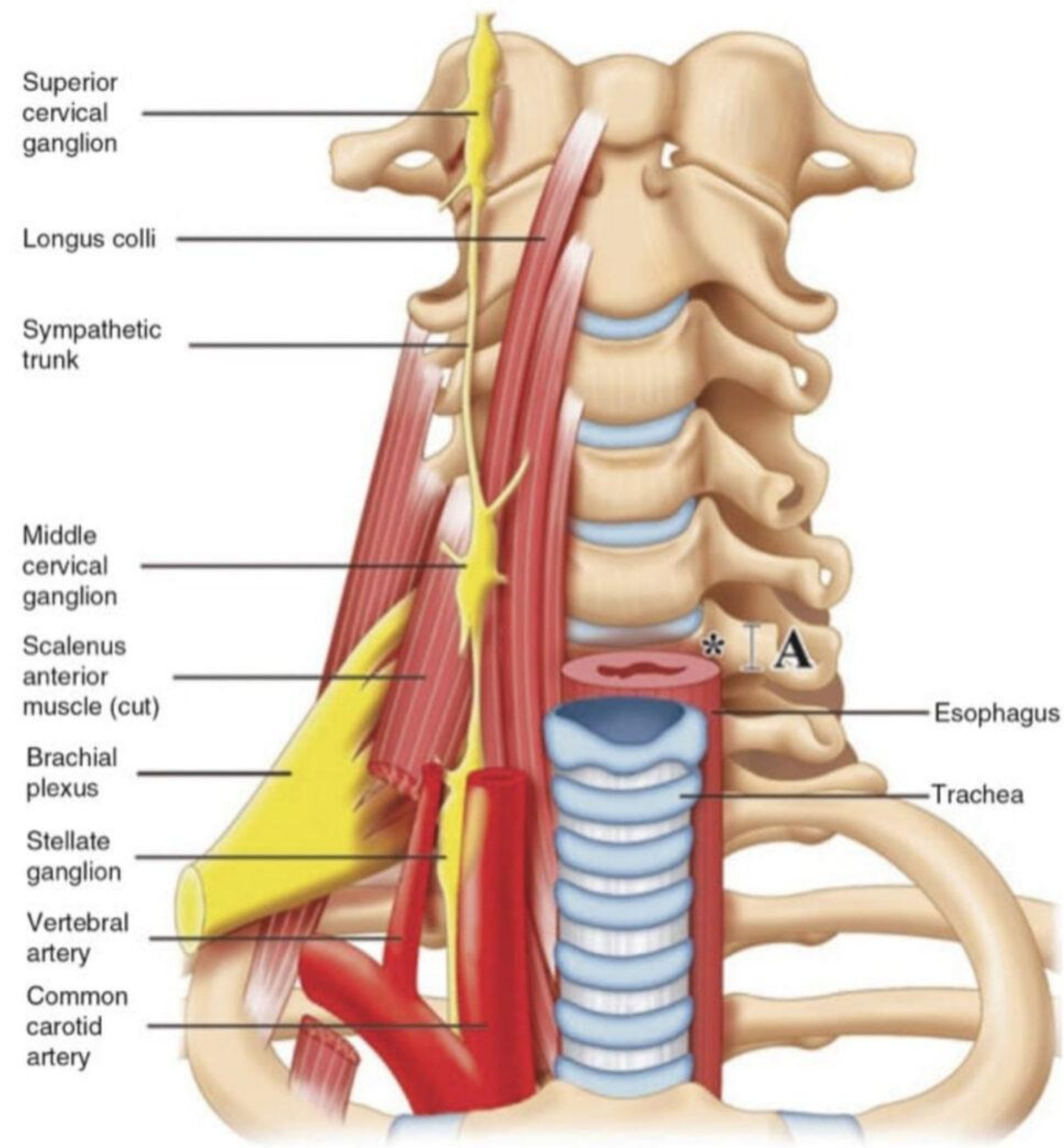


Figure 1: Cervical Sympathetic chain and SG anatomy. (Adopted from NYSORA 2022 (ref #7) who adopted it with permission from usra.ca

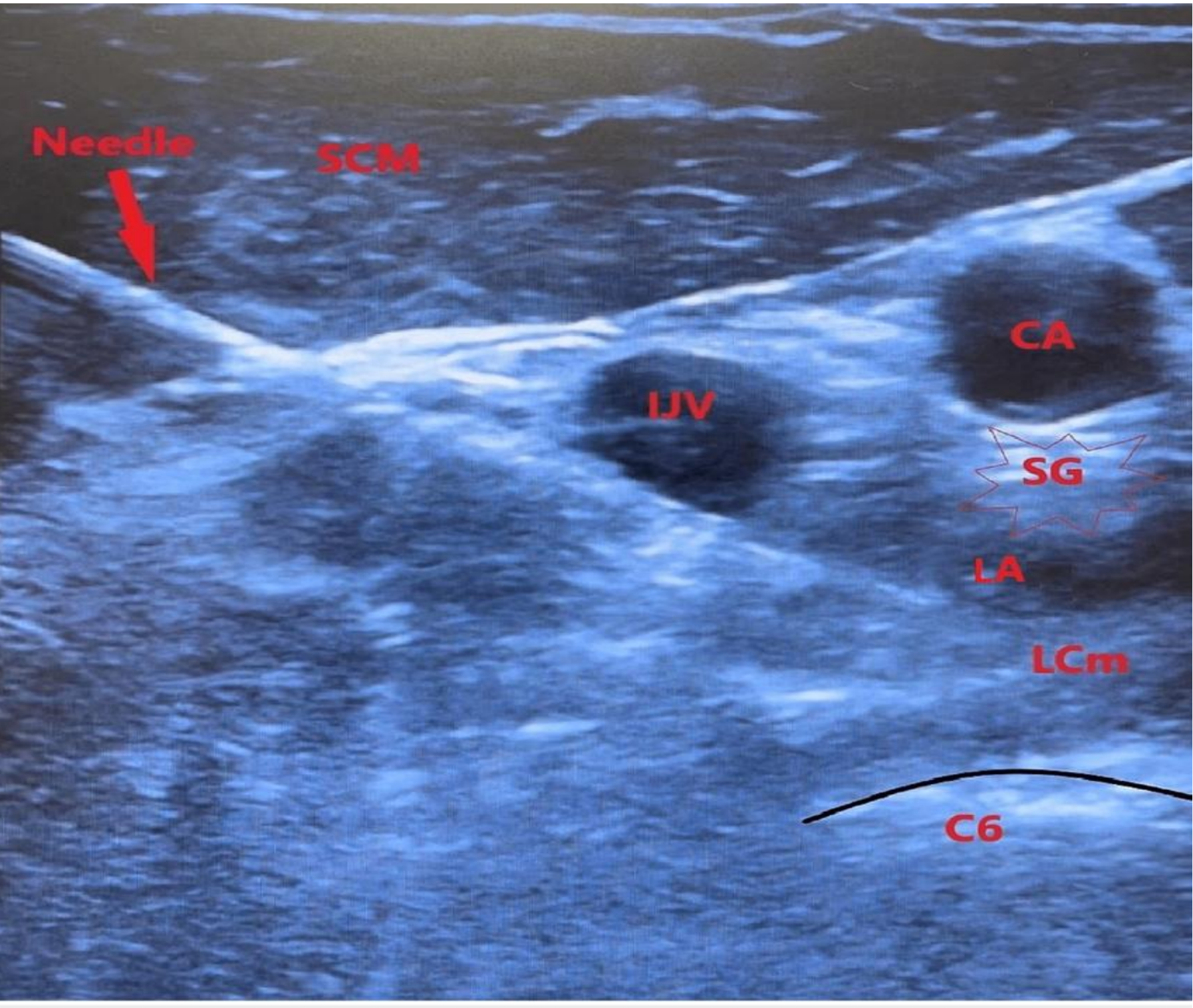


Figure 2: Ultrasound anatomy of SGB at C6 level showing internal jugular vein (IJV), carotid artery (CA), sternocleidomastoid (SCM), longus colli muscle (LCm), and stellate ganglion (SG). Adopted from Lopez et al, 2023, ref #6

Case Presentation

A 23-year-old woman with a history of H. pylori, GERD, and CRPS of the right UE presented for her fifth right-sided SGB. Her CRPS was previously managed with intermittent SGBs and nightly gabapentin 300 mg without notable side effects.

The procedure was performed under ultrasound guidance. Needle placement was confirmed by hydrodissection above the longus colli using 1–2 mL of normal saline. Total of 7.5 mL of 0.25% bupivacaine with 50 mcg clonidine was incrementally injected, totaling 8 mL.

Post-procedure, she reported nausea which improved with 1L of IV fluids and was discharged. She returned to the University of Virginia ED 24 hours later with dysphagia, aphonia, migraine, dizziness and dyspnea on exertion.

The patient was admitted, and lab workup (CBC/CMP) were unremarkable. CT head and CTA neck were negative for acute findings. ENT was consulted and performed flexible laryngoscopy which showed normal vocal cord motion.

Overnight, her symptoms improved with IV fluids, diphenhydramine, and prochlorperazine, and she was cleared for discharge. At home, she continued to experience dysphagia and dyspnea. An outpatient ENT evaluation and flexible laryngoscopy showed normal findings. ENT diagnosed her with compensatory dysphagia, and she underwent speech therapy with resolution of symptoms over several weeks.

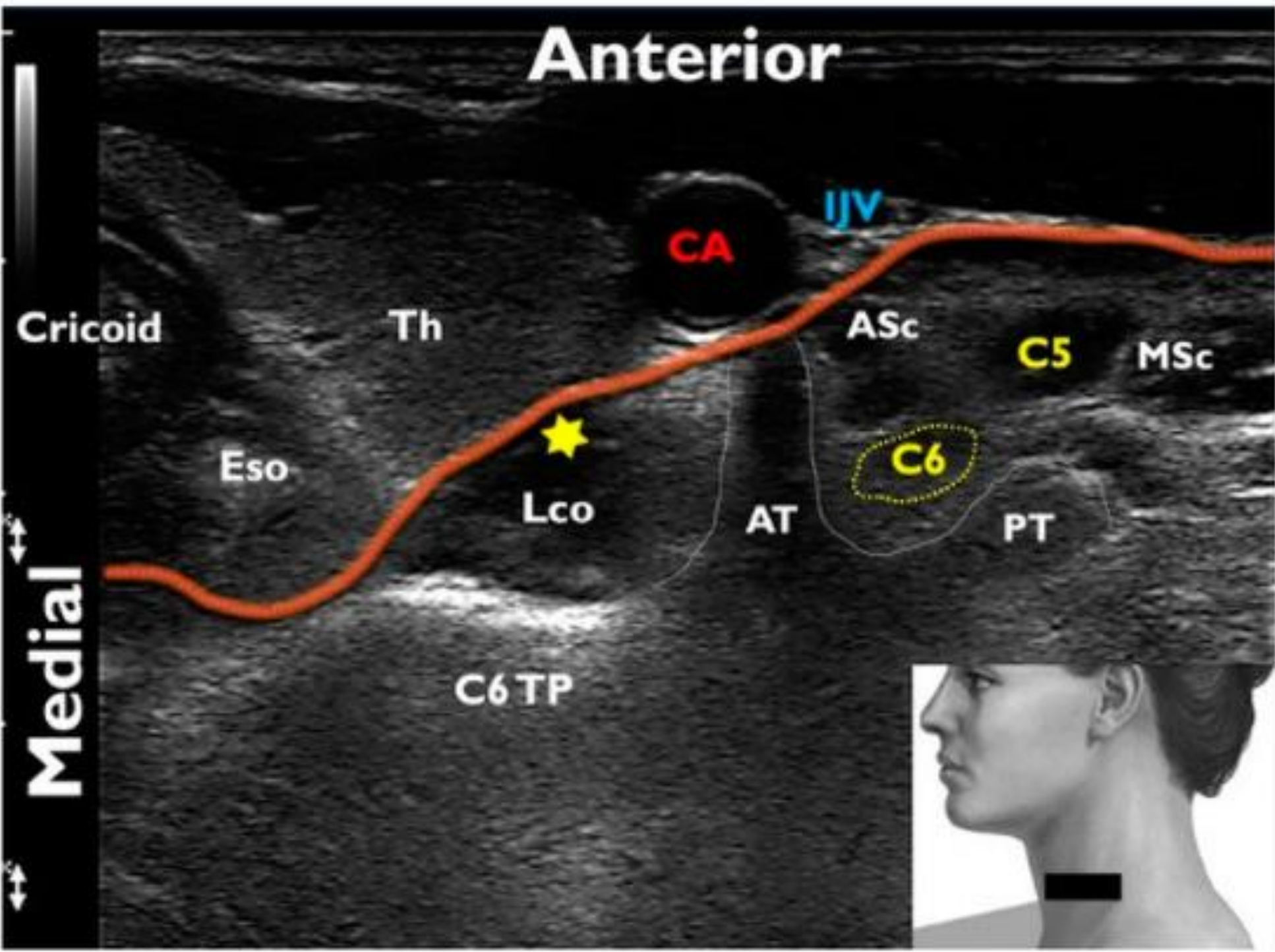


Figure 3: Transverse ultrasound view at the level of C6 for left SGB. longus colli muscle (Lco); transverse process (C6TP), anterior and posterior tubercles of the traverse process (AT and PT); C6 and C5 nerve roots, anterior and middle scalene muscles (ASc and MSc. Adopted from Yoo et al, 2019, ref #8)

CONCLUSIONS

- Post-SGB dysphonia and dysphagia can be due to injury to the recurrent laryngeal, supralaryngeal, or phrenic nerve (1).
- If structural causes are excluded, muscle tension dysphagia/dysphonia, which refers to difficulty swallowing due to hyperfunction of laryngeal muscles, can be considered (2,3).
- Treatment involves behavioral strategies, including speech therapy and manual manipulation around the larynx (4,5).
- In this patient, the likely cause was compensatory tension following a temporary block of the recurrent laryngeal nerve.

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