On the Tip of the Tongue:

Anesthetic Dilemmas for C-Section with Metastatic Cancer

Theresa Nguyen[1], BS; Zoe Baxter[1], BS; Laurie Chalifoux, MD[1,2,], FASA
Grand Rapids, Michigan

1. Michigan State University College of Human Medicine
2. Corewell Health Department of Anesthesiology

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Patient Presentation

30 y.o. G2P1 at 35.3 with Stage IV SCC presents to the ED for hypercalcemia per oncologist's recommendation

- **PMHx:** Initial dx in 2018, partial glossectomy, dissection, and radiation; recurrence in 2023.
- **SHx:** Prior C/S, spinal fusion (T11-L3), laminectomy L1/L2
- **SH:** Former smoker ~2 years, former vaper

ED Findings:

Vitals: WNL, BP: 142/86

Calcium: 12.1 mg/dL, recheck 11.3 mg/dL

Calcium Ionized: 1.53 mmol/L, recheck 1.56 mmol/L

Vitamin D 1,25 Dihydroxy: 124 pg/mL

PTH: <6.0pg/mL

PTHrP: 7.6 pmol/L

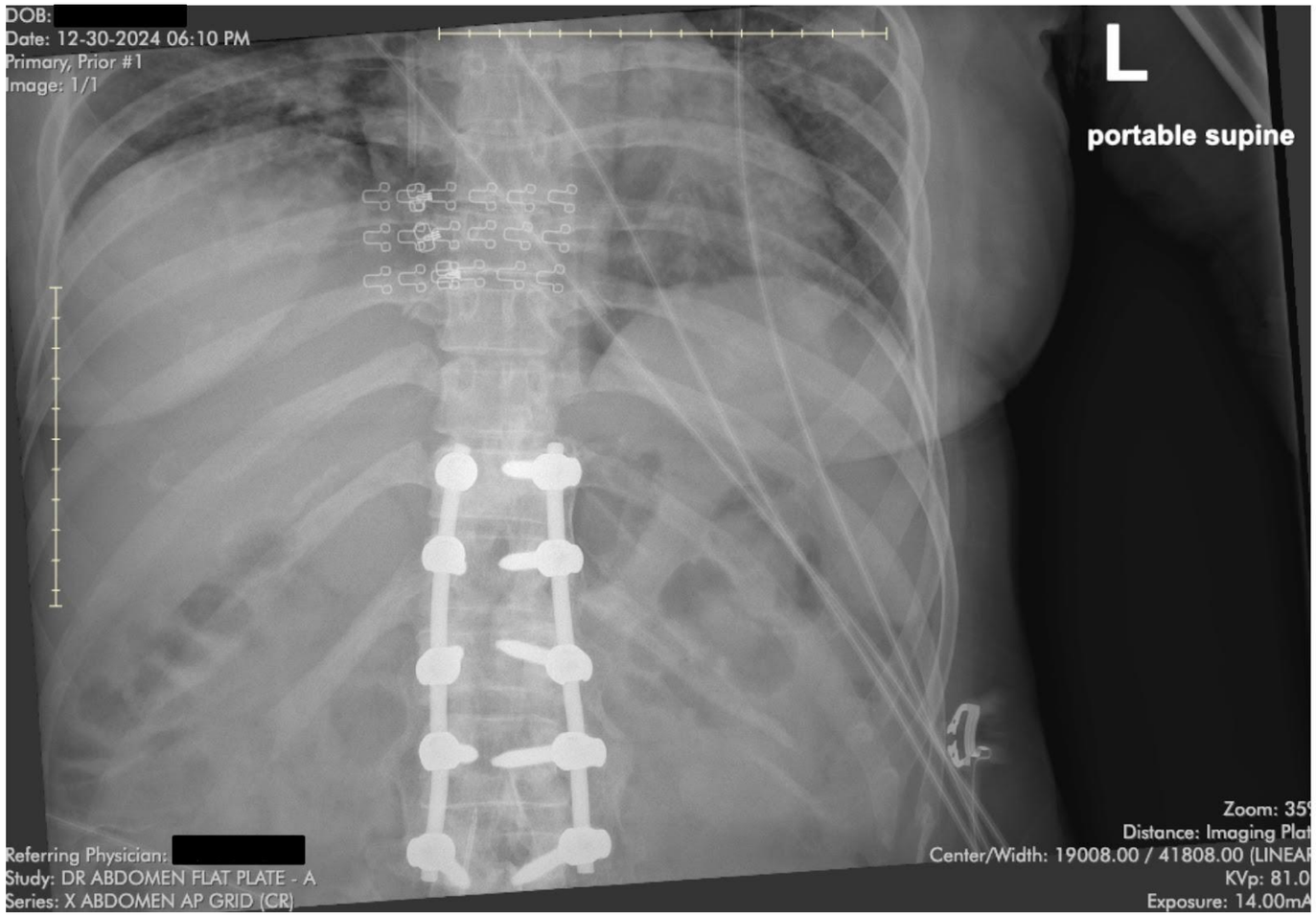

Figure 1. Abdomen Flat Plate- AP showing calcification in the right lower quadrant within the known teratoma.

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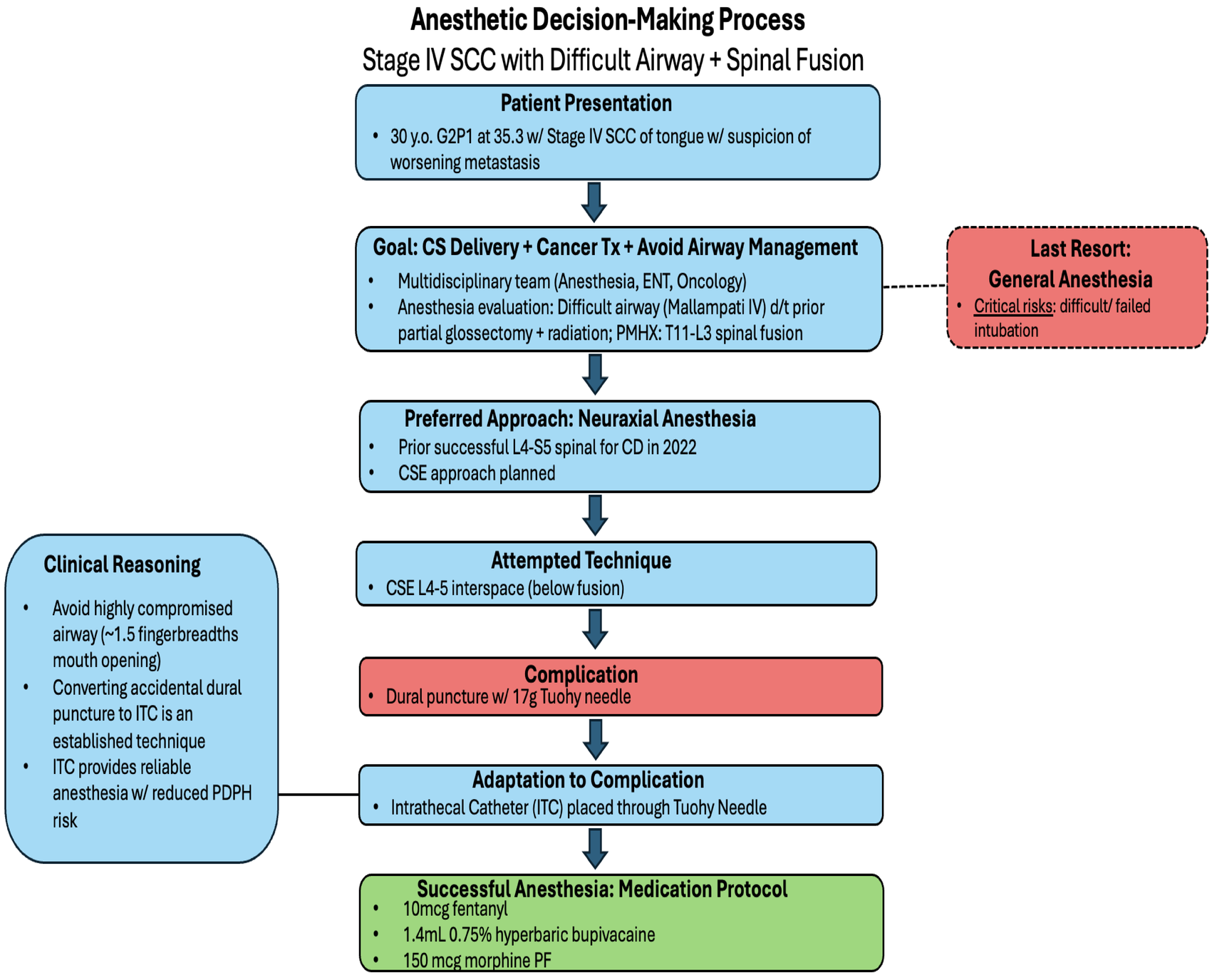
Intervention



- Combined spinal-epidural (CSE) at L4-L5 to allow epidural dosing if needed
- Limited airway access made intubation a high-risk backup plan
- Procedure was complicated by an unintentional dural puncture, likely due to post-surgical spinal changes
- An intrathecal catheter was threaded and dosed incrementally for surgical anesthesia
- The patient tolerated the procedure well with no complications or post-dural puncture headache

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Discussion

- Tongue SCC can restrict safe airway access, limiting anesthesia options for cesarean delivery
  - Sx + disease progression could have led to more complications had ITC been unsuccessful
- Intrathecal catheter provides reliable anesthesia in patients with spinal complications
  - Allows precise titration to prevent excessive block height and redosing if surgery was prolonged [1].
  - Studies suggest that scar tissue may prolong placement but does not increase difficulty in managing dural puncture [2].

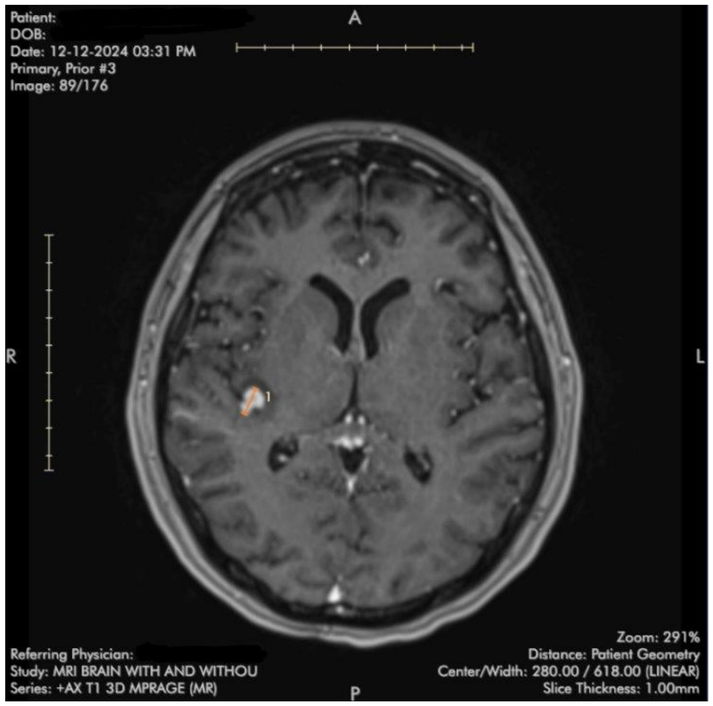

Figure 2. MRI without contrast showing multiple enhancing nodules within the brain highly suspicious for intracranial metastatic disease.

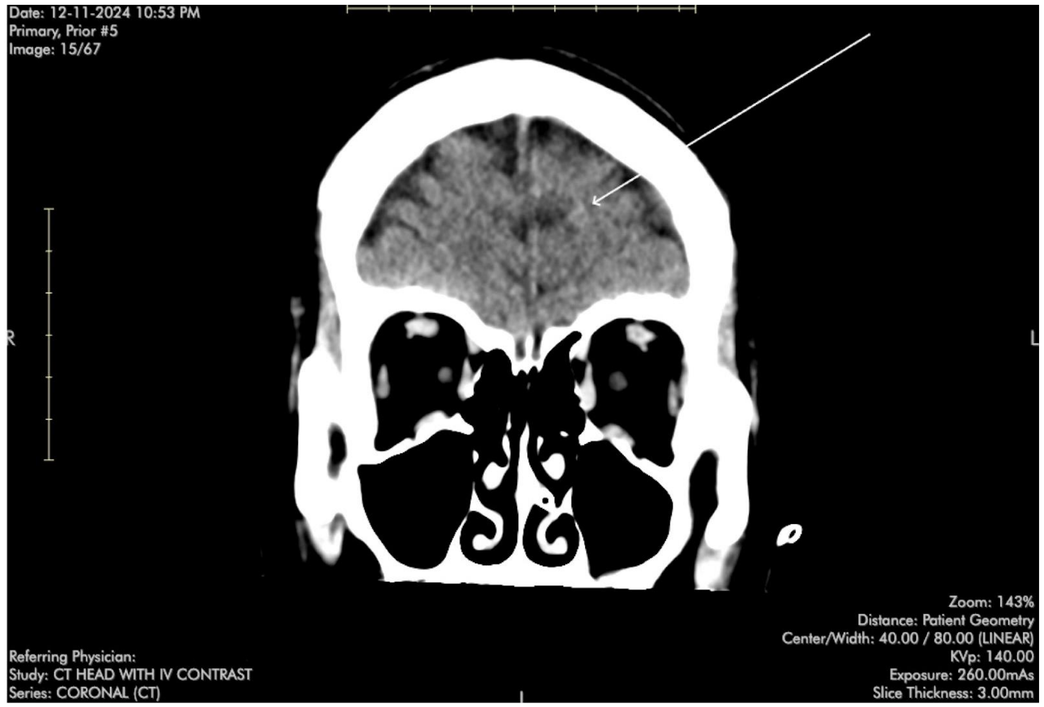

Figure 3. CT head with IV contrast showing attenuation/enhancement of posterior inferiorly in the insula on the right with adjacent edema.

References

1. **Griffiths SK, Russell R, Broom MA, et al.** Intrathecal catheter placement after dural puncture in obstetrics: guidelines. *Anaesthesia.* 2024;79(12):1348-68. doi:10.1111/anae.16434.
2. **Ahsan T, Wang AY, Karimi H, et al.** Safety and efficacy of spinal anesthesia in comorbid patients. *World Neurosurg.* 2023;177:e110-7. doi:10.1016/j.wneu.2023.05.116.

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Questions?

Contact Information

Theresa Nguyen
Michigan State University
College of Human Medicine
Class of 2027

Email: nguy1410@msu.edu

Zoe Baxter
Michigan State University
College of Human Medicine
Class of 2027

Email: baxterzo@msu.edu