# When Neuraxial Is the Only Safe Airway: Managing a Non-Intubatable Parturient with Myasthenia Gravis and Anticoagulation

BOSTON MEDICAL CENTER
EXCEPTIONAL CARE. WITHOUT EXCEPTION.

*Gabrielle M. Migliozzi M.D., Nicole Spence M.D. FASRA, Rachel A. Achu-Lopes, MD*

## Background

**Myasthenia Gravis in Pregnancy :**

- **30%** of pregnancies: patients experience symptom exacerbation (frequently in 1st trimester)
- **27%** risk of postpartum exacerbation
- Associated with:
  - **Preterm birth (~ 9%)**
  - **Neonatal myasthenia (~ 9%)**

**Subglottic Stenosis:**

- Narrowing of the airway **below the vocal cords**
- Severe cases →**Difficult or impossible endotracheal intubation**

# The Case Report:

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**40 y/o G8P1332 at 32 weeks** admitted for **Pre-eclampsia without severe features**

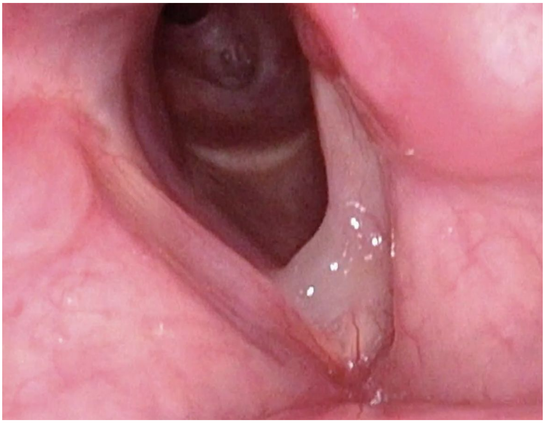
- Myasthenia gravis
- Antiphospholipid syndrome
- Asthma

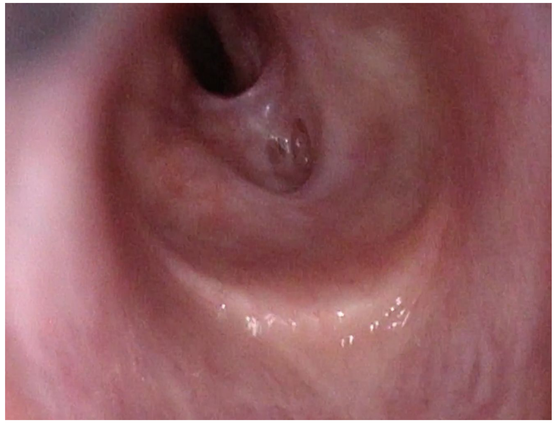
**2022 Prior GA C/S iso COVID-19 ARDS → prolonged intubation → subglottic stenosis**

## Multi-disciplinary Coordination:

**Neurology, ENT, Obstetric anesthesia, NICU, MFM**

- Neuro : Avoid **magnesium**, macrolides, aminoglycosides, corticosteroids, **beta-blockers**
- MFM : enoxaparin →10,000u SQH BID, **Deliver at 34 weeks**
- ENT : anterior scarring with a **4-mm posterior lumen→not intubatable→tracheostomy if neuraxial not available**
- **OB Anesthesia : prioritization of Neuraxial →10,000u Heparin BID→5,000u TID**





## Development of Pre-eclampsia WITH severe features

→Delivery moved earlier → **32 weeks + 3 days**

## Main OR & ENT Present

- Combined spinal-epidural (L2-L3)
- Spinal: 12mg hyperbaric bupivacaine + 10mcg fentanyl

## Successful cesarean delivery

- No airway intervention
- Hemodynamically stable
- Close respiratory monitoring in SICU post-op

**Critical Constraint: Non-intubatable airway →neuraxial anesthesia as priority and potentially life-saving strategy**

# Conclusion

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## Neuraxial anesthesia was critical: and required careful planning

- ❖ Multiple high risk conditions narrow anesthetic options
- ❖ In our case:
  - ➢ **Myasthenia Gravis** →Neuraxial preferred, **avoid neuromuscular blockade**
  - ➢ **Subglottic Stenosis** →not intubatable →**back-up** plan for emergent tracheostomy
  - ➢ **Antiphospholipid syndrome** →adjust **anticoagulation timing/dose** for **timely neuraxial**

## Multidisciplinary Coordination is essential in high-risk obstetric patients

- ❖ Early planning across **Neurology, ENT, Obstetric anesthesiology, NICU, MFM** guided proactive management of potential complications, **timing of delivery**, anticoagulation management, and intraoperative care

References