

# DIFFICULT AIRWAY AND NEUROFIBROMATOSIS TYPE 2: ANESTHESIA FOR URGENT CESAREAN SECTION

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**Case:** URGENT cesarean section for G1P0 at 33 weeks due to worsening preeclampsia and Category II FHR tracing

- Neurofibromatosis Type 2
- Twin pregnancy (di-di, IVF)
- Recent coronavirus infection with new oxygen requirement (1-2 L)
- Laryngomalacia with tracheostomy until age 2
- DMII and DKA on admission
- Hypothyroidism

Anesthesia  
Consult prior  
afternoon:

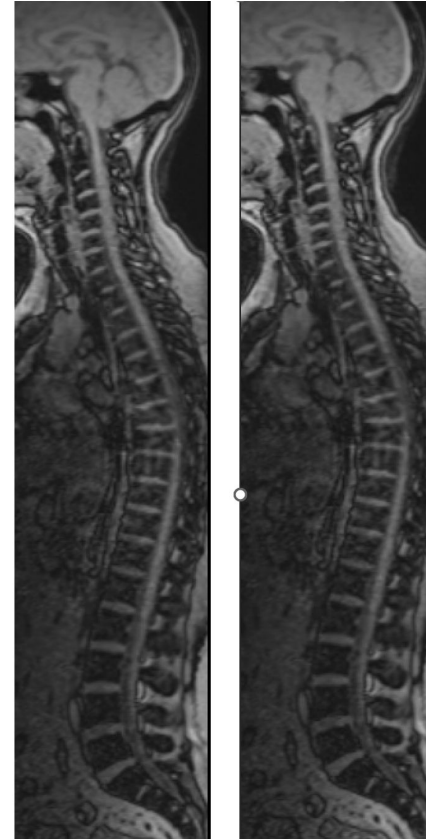
- Reviewed imaging & History
- Exam

Neurology  
Consulted:

- Repeat spine MRI

ENT  
Consulted:

- Unavailable



Neurofibromatosis Type 2:

- Autosomal dominant
- Vestibular schwannomas
- CNS tumors:  
Schwannomas,  
Meningiomas, and  
Ependymomas
- General Anesthesia  
Considerations:
  - Neurofibromas in and around airway
  - Access
- Neuraxial Anesthesia  
Considerations:
  - CNS tumors
  - Increased ICP
  - Prior surgeries

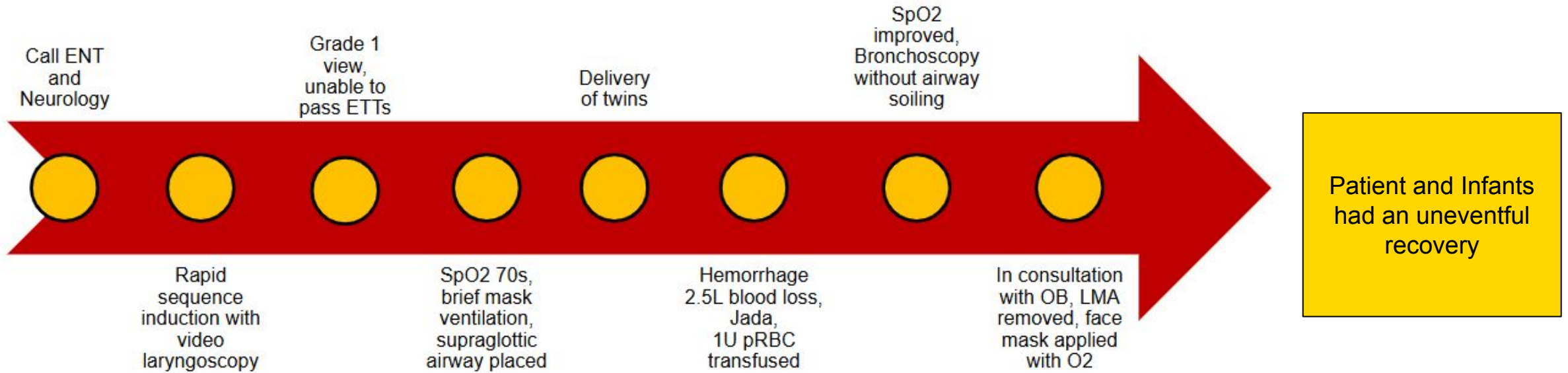


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## Neuro Consult:

- Repeat MRI not complete before c/s called
- Recommended against Neuraxial

## ENT Consult:

- Not available in person

## Postoperative ENT Consult:

- Elongated arytenoids
- Vocal cord hooding



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## Master algorithm – obstetric general anaesthesia and failed tracheal intubation

### Algorithm 1 Safe obstetric general anaesthesia

**Pre-induction planning and preparation**  
 Team discussion

**Rapid sequence induction**  
 Consider facemask ventilation ( $P_{\max}$  20 cmH<sub>2</sub>O)

**Laryngoscopy**  
 (maximum 2 intubation attempts; 3<sup>rd</sup> intubation attempt only by experienced colleague)

**Success**

Verify **successful** tracheal intubation and proceed  
 Plan extubation

**Fail**

### Algorithm 2 Obstetric failed tracheal intubation

**Declare failed intubation**  
 Call for help  
 Maintain oxygenation  
 Supraglottic airway device (maximum 2 attempts) or facemask

**Fail**

### Algorithm 3 Can't intubate, can't oxygenate

**Declare CICO**  
 Give 100% oxygen  
 Exclude laryngospasm – ensure neuromuscular blockade  
 Front-of-neck access

**Success**

Is it essential/safe to proceed with surgery immediately?

No

Wake

Yes

Proceed with surgery

### Considerations:

- ↓ FRC
- O<sub>2</sub> requirement
- ↑ Airway edema
- ↑ Aspiration Risk
- PMHx

### Management:

- Call for Help
- Advanced Airway Equipment
- Early involvement of a multidisciplinary team in the antenatal period



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