PARALYSIS, PREGNANCY, AND THE DELIVERY PLAN: NAVIGATING ANESTHESIA IN ATYPICAL GUILLAIN–BARRÉ SYNDROME

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Background:

Guillain–Barré syndrome (GBS)

- Immune mediated polyradiculoneuropathy
- Acute onset, Symmetric ascending muscle weakness, Hyporeflexia
- Respiratory failure, autonomic dysfunction
- Tx: Early IVIG / plasma exchange, Supportive (Physiotherapy, DVT prophylaxis, respiratory support)

In pregnancy

- Rare (1.2 - 1.9 per 100,00 annually)
- Mostly in 3rd trimester
- Challenging diagnosis → Early symptoms mimic common OB or MSK complaints
- Potentially lethal → Rapid neuromuscular deterioration and respiratory failure
- Urgent maternal stabilization - Complex anesthetic decision-making for delivery

Case & Clinical Course Timeline:

28 F, G1P0, GA 30 weeks, Healthy, Family Hx: (-) → Onset: Generalized weakness + Paresthesia + Pain

Week 1

- Multiple hospital visits
- No definite Dx
- AB for UTI
- → Home
- Progression

Week 2

- Resp. failure
- Urgent intubation
- → Sinai ICU
- Consults
- Workups
- IVIG/ PLEX/ Steroid

Week 3

- Bulbar weakness
- → Tracheostomy
- Response onset
- Mimics GBS
- 1st Anesthesia consult

Initial Anesthetic Plan

NO clear delivery plan
NO clear Neuro Dx

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Avoid Neuraxial

CS → **GA**
Vaginal → **IVPCA**

Week 6

- Partial recovery
- Decannulated
- Neurology exam
- Possible atypical GBS
- Pregnancy → Stable
- 2nd stage of labour?

Week 9

- Recovery phase
- Muscle Power 4/5
- Neurology exam
- Atypical GBS
- Plan: Elective CS
- 2nd Anesthesia consult

Final Anesthetic Plan

Dx Atypical GBS
Elective CS (38+4)

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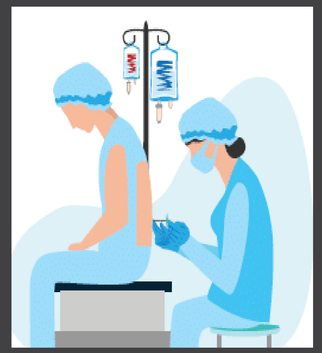
Titrated CSE

(1.3 ml Bupivacaine 0.75
+ 15 mcg Fentanyl
+ 0.1 mg Morphine)

No top ups needed



- Vasopressor
- Uterotonic / EBL 770
- 3180 g girl – Apgar 9
- Hemodynamic Stable
- → PACU → Ward

- **Post-op day:**
- No pain, Power 4/5
- No Neurologic change

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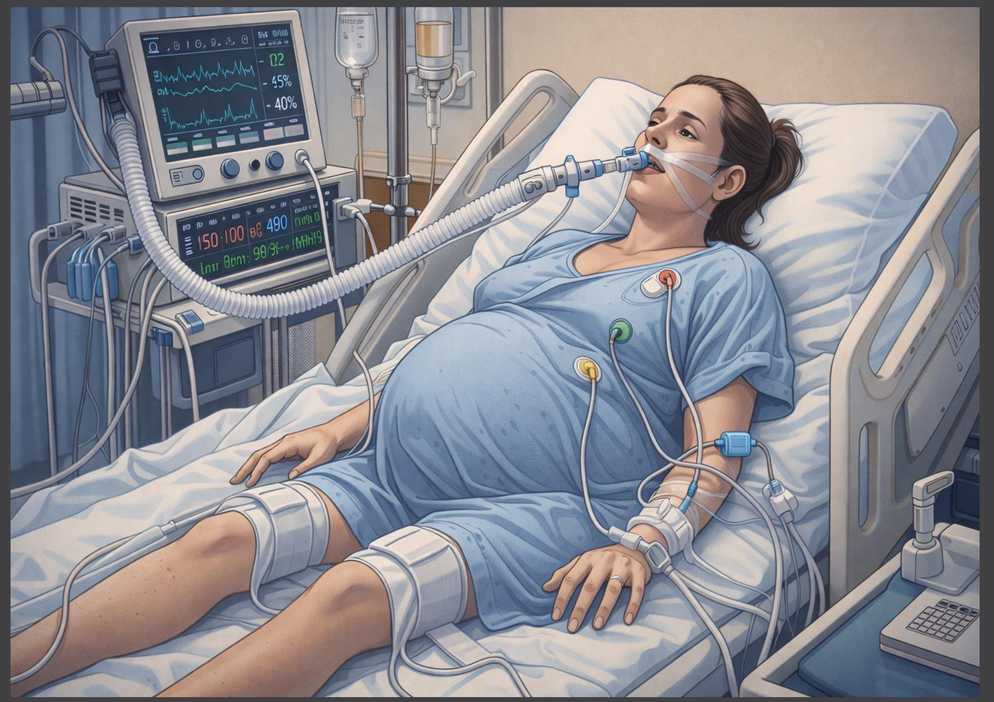
Teaching points:

- Challenging recognition of GBS in pregnancy
- Diagnostic uncertainty should not delay planning
- Proactive AW protection at any time
- Repeated neurological assessment → Essential → Dynamic anesthetic plan
- Individualized, multidisciplinary decision-making
- No single optimal anesthetic strategy
- Titrated CSE → May be safe & effective during recovery phase of GBS



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References

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2. Obstet Gynecol. 2016;128:1105–1110