

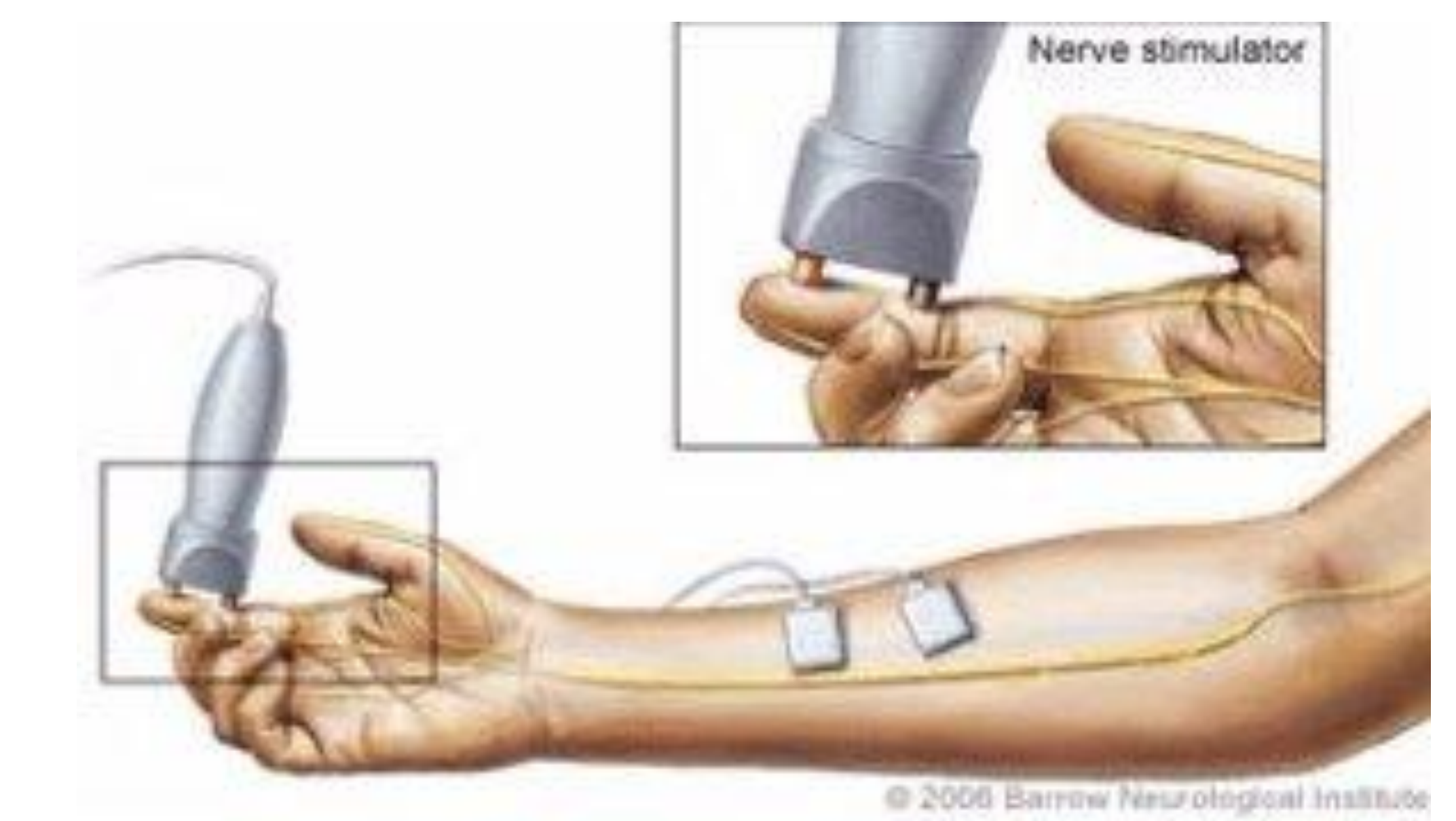
Management of Cramp Fasciculation Syndrome During Childbirth: A Case Report

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Background

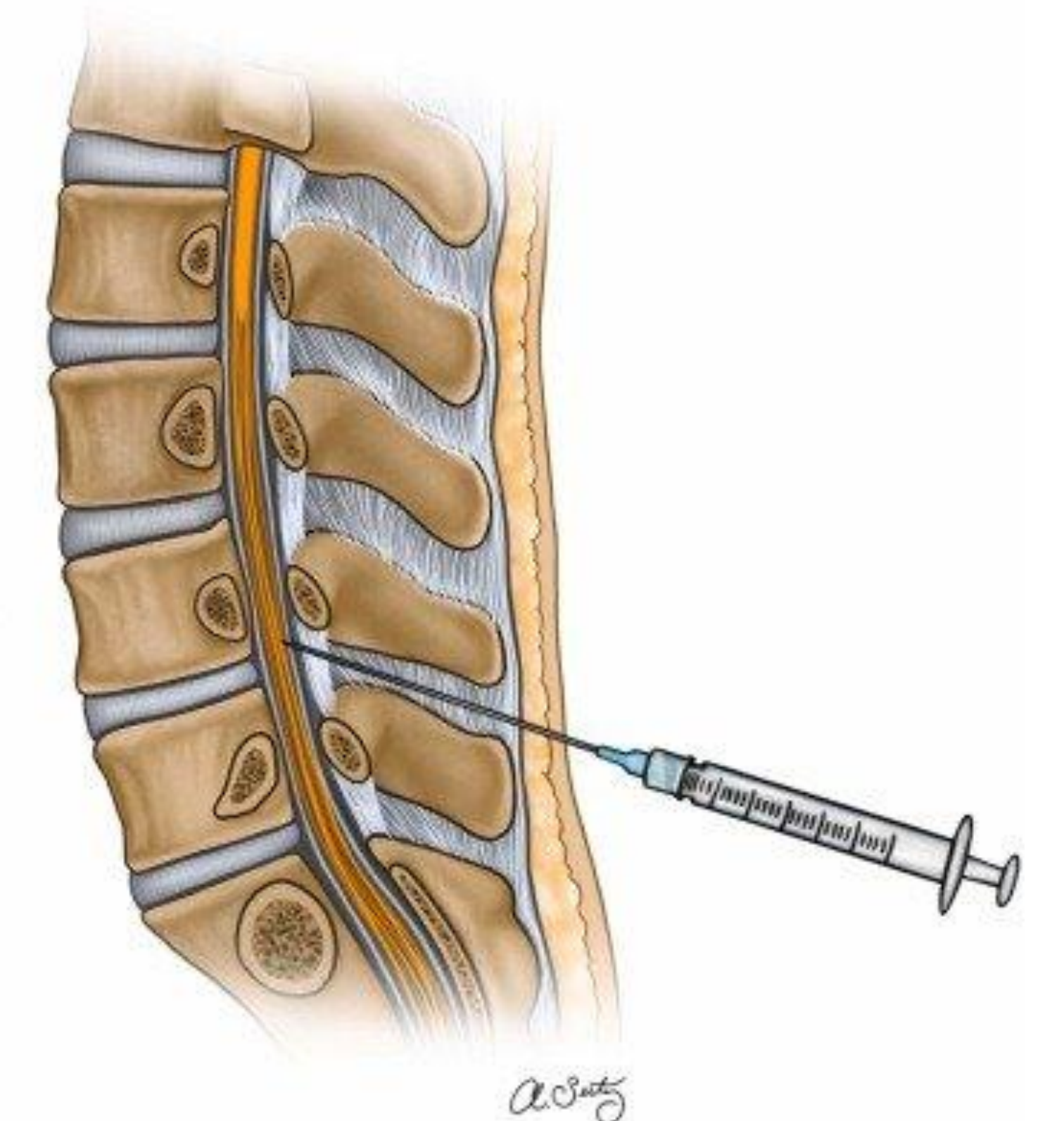
- Definition: Rare peripheral nerve hyperexcitability with muscle fasciculations, cramps, pain, stiffness, episodic fever, and hyperreflexia.
- Diagnosis: nerve conduction studies, targeted laboratory evaluation, and muscle biopsy.
- Etiology: largely idiopathic; associations with ion channel disorders, anterior horn disease, metabolic abnormalities, and thymoma.
- Clinical implications: broad differential with several clinical look-alikes
- Management: symptomatic care; neurology/pain input; no established disease-modifying therapy; evidence base limited.
- Anesthetic/obstetric considerations: literature guiding labor/delivery management is limited



Case



- . Patient: 31-year-old, G1P0, 39w1d induction for gestational diabetes requiring meds
- . PMHx: celiac disease; marginal cord insertion
- . Physical Exam: Mallampati 4, no active CFS symptoms
- . CFS history: severe lower-extremity cramping and fever; fasciculations triggered by stress; partial response to benzodiazepines and IVIG; CK normal
- . Patient Concerns: fasciculations and potential lower-extremity rigidity could impede positioning during vaginal delivery
- . Multidisciplinary plan: early neuraxial labor analgesia; availability of IVIG and diazepam; malignant hyperthermia precautions
- . Intrapartum course: epidural placed early; single prophylactic diazepam dose
- . Outcome: healthy vaginal delivery; no fasciculations intra-/postpartum; 4-day hospitalization; no postpartum myalgias



Teaching Points

Table 1. Anesthetic Considerations in Cramp Fasciculation Syndrome

Phase	Key Considerations	Clinical Rational
Pre-Delivery	• Thorough documentation of baseline neurologic symptoms • Identify known triggers (pain, stress, etc) • Check electrolytes (Ca^{2+}, Mg^{2+}, K^{+})	Establishes reference for peri-delivery changes; minor physiologic stressors can exacerbate neuromuscular hyperexcitability
Labor Analgesia	• Early neuraxial anesthesia	Reduces pain and stress-induced fasciculations and rigidity
Neuraxial Anesthesia	• No contraindication for spinal/epidural • Monitor motor side effects closely	CFS is a peripheral nerve disorder; no evidence of neuraxial involvement
General Anesthesia	• Avoid succinylcholine • Use non-depolarizing NMBA's cautiously • Quantitative twitch monitoring if available	Risk of exaggerated fasciculations and prolonged blockade in neuromuscular diseases

Phase	Key Considerations	Clinical Rational
Reversal of NMB	• Prefer Sugammadex over anticholinesterases	Cholinergic activation may precipitate muscle fasciculations
MH Precautions	• Consider MH precautions	Symptoms overlap (rigidity, hyperthermia, etc); limited data on conservative planning
Adjunct Medications	• Benzodiazepines available for acute flares • IVIG for severe/refractory symptoms	Reduce Neuronal excitability; used in peripheral nerve hyperexcitability syndromes
Postpartum	• Monitor for delayed myalgias or rigidity	Symptoms can recur after anesthetic or physiologic stress