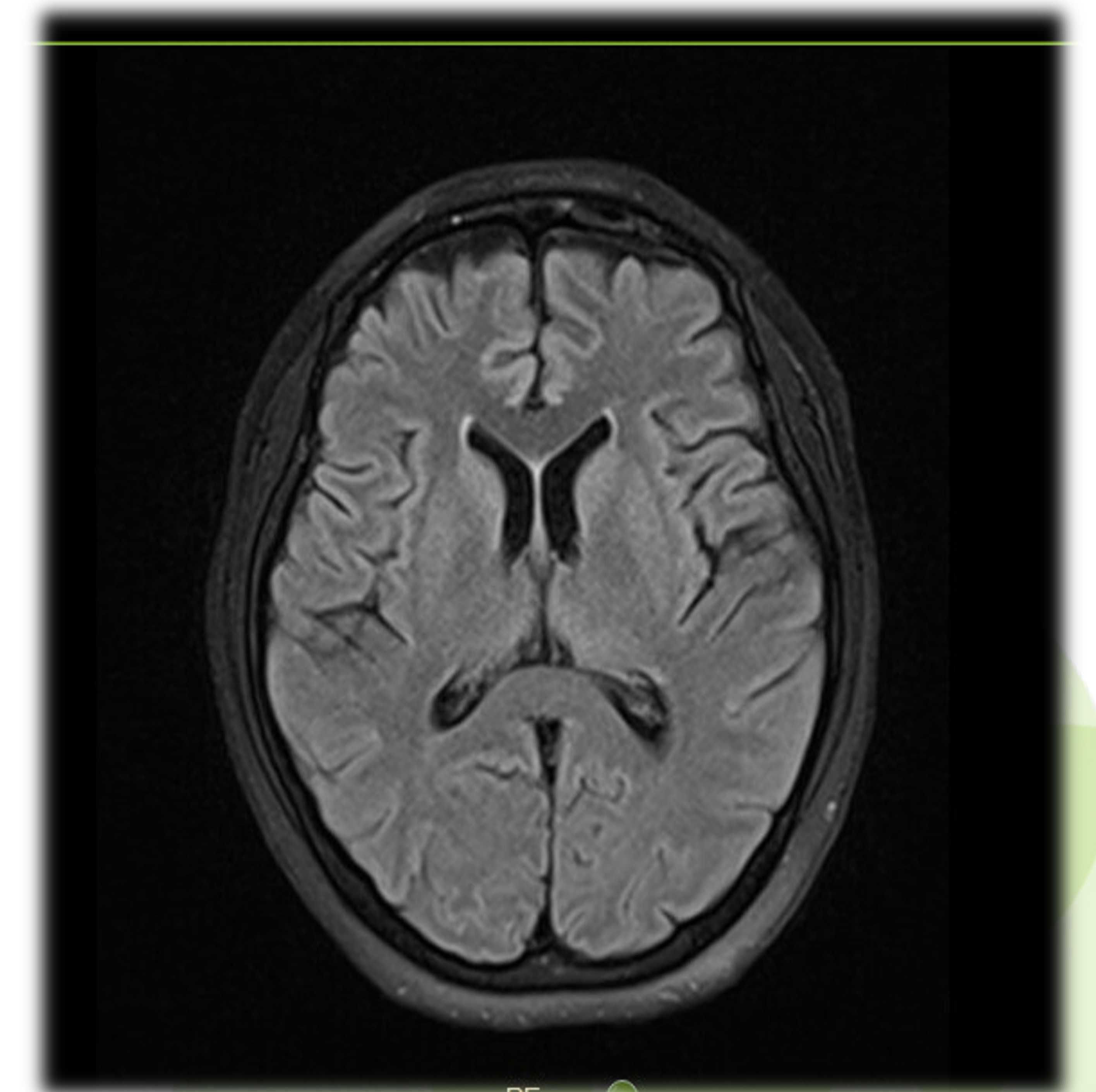


Axonal Polyneuropathy in a Patient with Hyperemesis Gravidarum

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Case Presentation

- 24 y/o G2P0 at 38⁶ weeks presented for primary C-section for multiple fetal central nervous system (CNS) anomalies.
- Diagnosed with Hyperemesis Gravidarum (HG) at 14 weeks gestation.
- Presented at 16 weeks gestation with new onset ascending bilateral lower extremity weakness, diffuse paresthesia, areflexia, nystagmus and altered mental status.
- Differential included neurologic, nutritional and psychogenic causes.
- MRI unremarkable. EMG mildly abnormal. CSF with elevated protein without pleocytosis.



Axonal Polyneuropathy in a Patient with Hyperemesis Gravidarum

Managing Nausea and Vomiting of Pregnancy (NVP)

- Spectrum of severity → Hyperemesis Gravidarum
- Combination of weight loss, electrolyte imbalance and/or dehydration
- Association with Wernicke's Encephalopathy (Dry Beri-Beri)
- Diagnosis of Exclusion
- Multi-modal therapy approach (outpatient vs. inpatient)

Anesthesia Considerations

- Baseline Neurological Exam
- Neuraxial vs. GA
- Close follow up



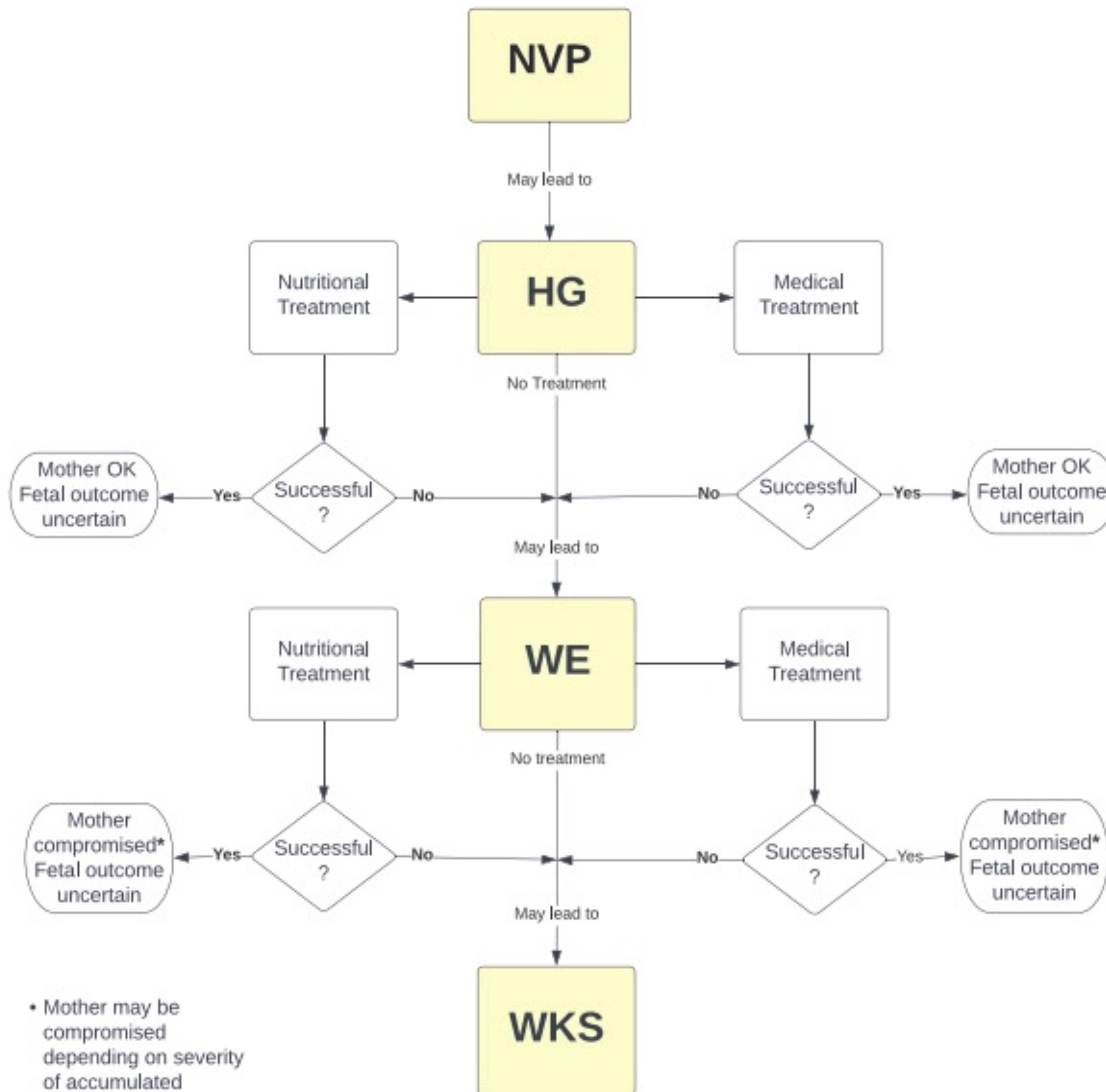
Progression of NVP to HG to WE to WKS



Axonal Polyneuropathy in a Patient with Hyperemesis Gravidarum

Learning Points

- Nausea is not always just a symptom of pregnancy.
- Early intervention is key!
- Monitor volume status, metabolic status and electrolyte imbalances.
- Hyperemesis gravidarum produces psychological stress in expectant mothers.
- Progression to HG implicated in both fetal and maternal mortality.



• Mother may be compromised depending on severity of accumulated injuries

References:

Erick M. Gestational malnutrition, hyperemesis gravidarum, and Wernicke's encephalopathy: What is missing? *Nutr Clin Pract* 2022; 37(6):1273-1290.

Hebl JR, Kopp SL, Schroeder DR, Horlocker TT. Neurologic complications after neuraxial anesthesia or analgesia in patients with preexisting peripheral sensorimotor neuropathy or diabetic polyneuropathy. *Anesth Analg*. 2006 Nov;103(5):1294-9. doi: 10.1213/01.ane.0000243384.75713.df. PMID: 17056972.