



Neurofibromatosis and Anesthesia in an Obstetric Patient – Case Report

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Neurofibromatosis Overview

- What is NF-1?
 - AD multisystem genetic d/o w/ complete penetrance
- Clinical Manifestations:
 - Café-au lait macules
 - Axillary/inguinal freckling
 - Lisch Nodules
 - Neurofibromas
 - Other tumors
 - Bone abnormalities
 - Neurologic abnormalities
 - Other
- Diagnosis:
 - Clinical diagnosis; but can be confirmed with genetic testing.

Case

- 23 y/o F G1Po who presents for scheduled CSx due to breach positioning.
- OBHx: breach fetal positioning otherwise healthy
- PMHx: neurofibromatosis type 1, optic nerve glioma, anxiety, ADHD, GERD, anemia of pregnancy (mild), and occasional headaches
- PSHx: none
- Exam: 5', 64kg, BMI 27.3, neuro exam was unremarkable

Anesthetic Considerations in NF1

- Pheochromocytoma is associated with NF1 and should be considered in the preop eval.
- When signs of elevated ICP are present, intracranial tumors should be considered.
- Potential laryngeal neurofibromas may compromise airway anatomy.
- Spinal or epidural placement in these patients may be difficult.
- Neuraxial imaging prior to neuraxial anesthesia?

REFERENCES

- Hines, Roberta & Marschall, Katherine (2018). *Stoelting's Anesthesia and Co-Existing Disease* (pp 292-293). Elsevier.
- Suresh, M., Shnider, S. M., & Fernando, R. (2013). *Shnider and Levinson's anesthesia for Obstetrics* (pp 562-653). Wolters Kluwer Health/Lippincott Williams & Wilkins Health.
- Korf, B. R., Lobbous, M., & Metrock, L. K. (2023, March 21). *Neurofibromatosis type 1 (NF1): Pathogenesis, clinical features, and diagnosis*. UpToDate. Retrieved April 17, 2023, from https://www.uptodate.com/contents/neurofibromatosis-type-1-nf1-pathogenesis-clinical-features-and-diagnosis?search=neurofibromatosis&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H10683464