Vagus Nerve Stimulator placement in an adult with Dyke-Davidoff-Masson Syndrome

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CASE DESCRIPTION:

•41-year-old female

•Past medical history:
- Dyke-Davidoff-Masson Syndrome
- Intractable epilepsy – Clobazam, Modafinil, Levetiracetam, Lacosamide, Zonisamide

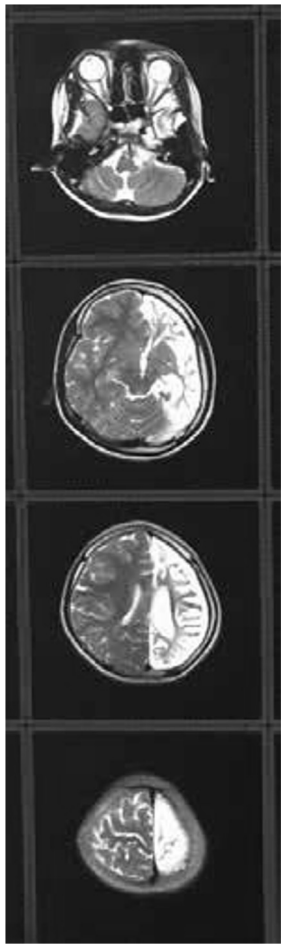
•Over 100 seizures in 2020

•Declined lesionectomy

•Procedure: Vagus nerve stimulator placement for intractable epilepsy

DYKE-DAVIDOFF-MASSON SYNDROME:

- Rare neurologic disorder
- Can affect children and adults
- Involvement of multiple systems



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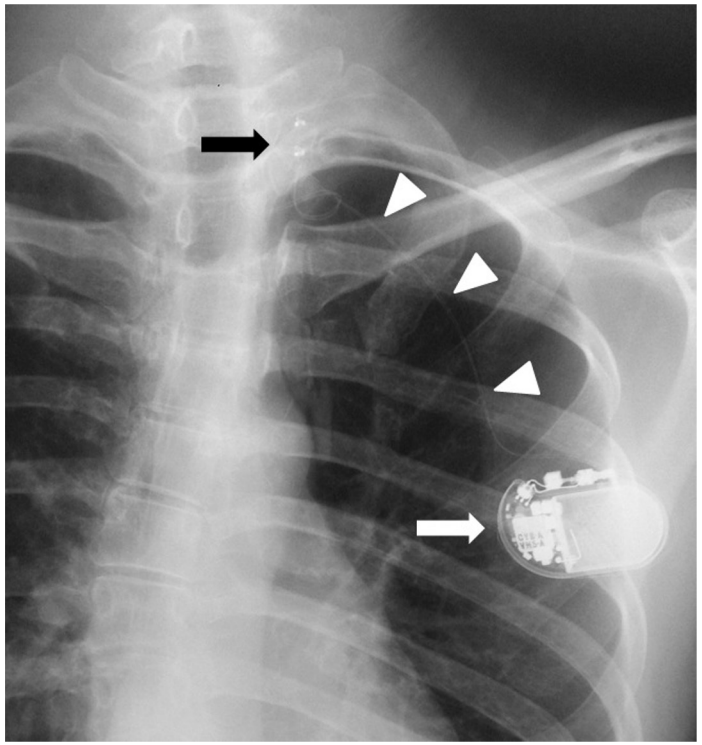
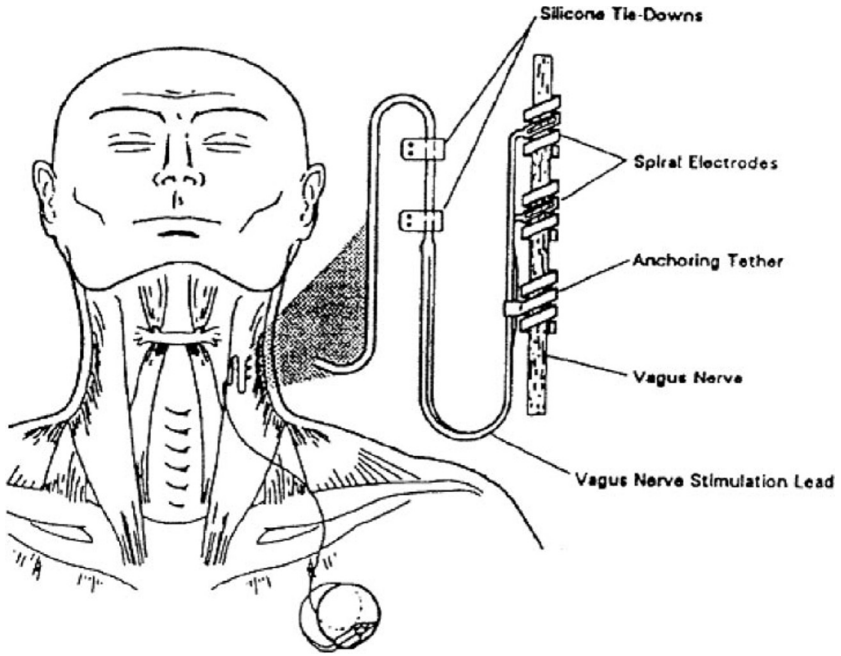
VAGUS NERVE STIMULATOR:

- Alternative treatment method for epilepsy
- Exact mechanism of action unknown
- Placement performed under general anesthesia



VNS CONSIDERATIONS:

- Medications
- Risk of hemorrhage
- Reduce risk of seizure
- Postoperative complications
- Additional surgery/imaging



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Conclusions:

- Dyke-Davidoff-Masson Syndrome has significant anesthetic implications including ability to consent, potential for difficult airway, concern for occult myopathy, and high seizure risk

- With vagus nerve stimulator placement anticipate the possibility of seizure activity, and hemorrhage along with potential postoperative peritracheal hematoma and hoarseness

References:

1. Hatton, Kevin W. MD; McLarney, J Thomas MD; Pittman, Thomas MD; Fahy, Brenda G. MD, FCCM Vagal Nerve Stimulation: Overview and Implications for Anesthesiologists, Anesthesia & Analgesia: November 2006 - Volume 103 - Issue 5 - p 1241-1249 doi: 10.1213/01.ane.0000244532.71743.c6
2. Bagle A, Nagdev T, Chadha G, Amonkar J. Anesthetic considerations in patients with Dyke-Davidoff-Masson syndrome: a case report and review of literature. Anaesth Pain & Intensive Care2017;21(1):105-108

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