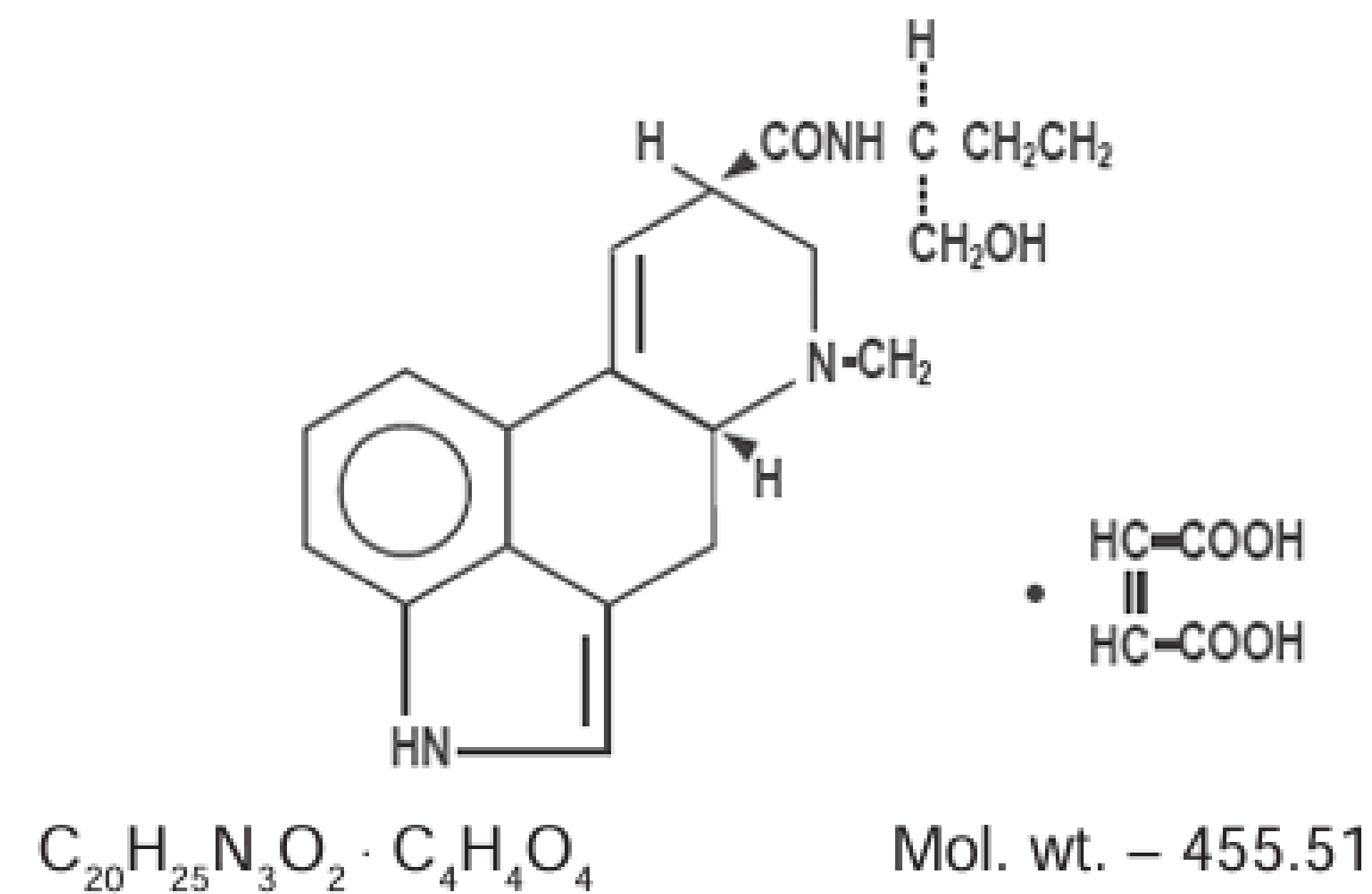


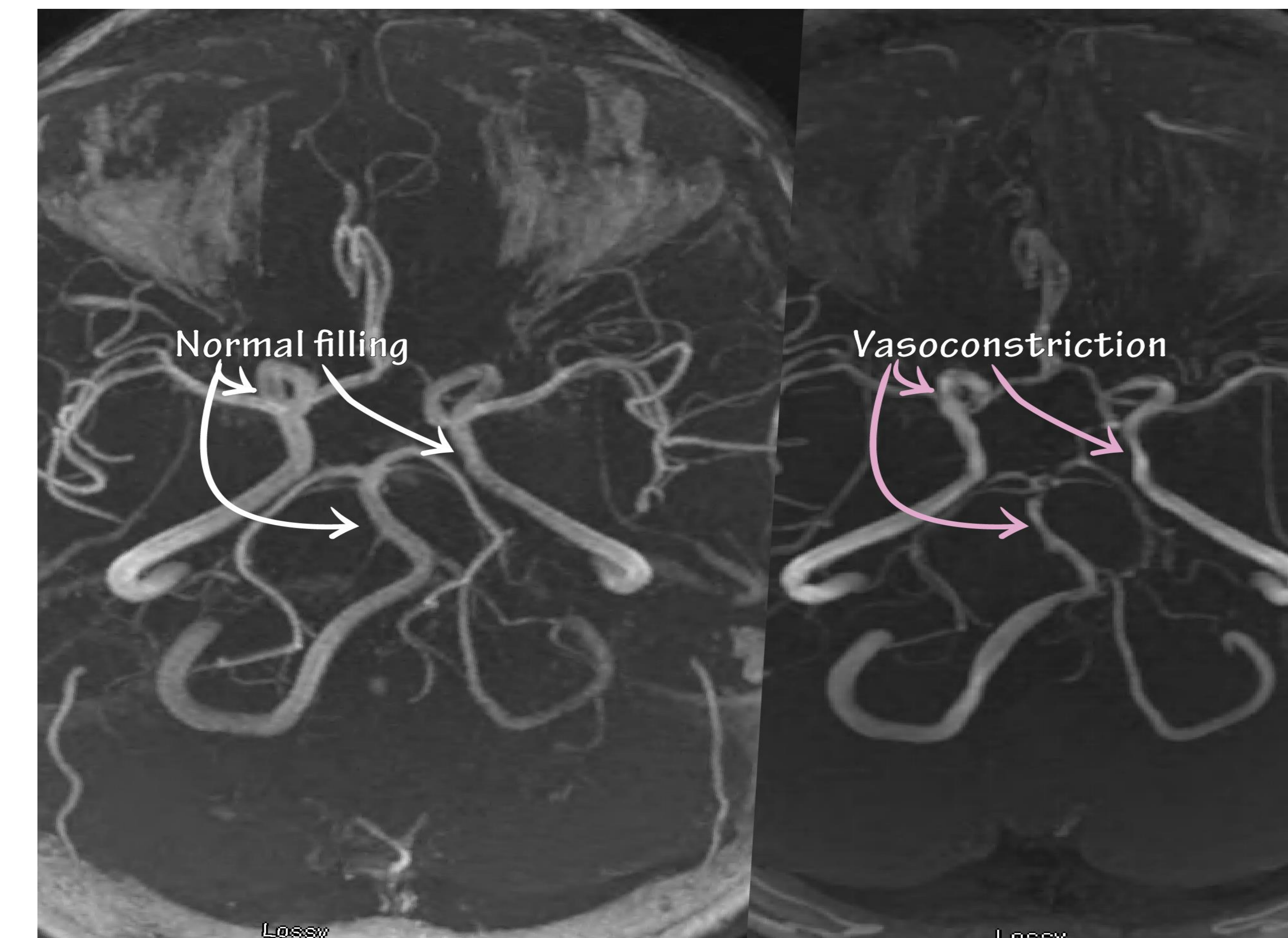
Reversible Cerebral Vasoconstriction Syndrome Following Methylergonovine Maleate Administration During Cesarean Delivery

Carolina Aravera, MD, Nakiyah Knibbs, MD

Methylergonovine Maleate

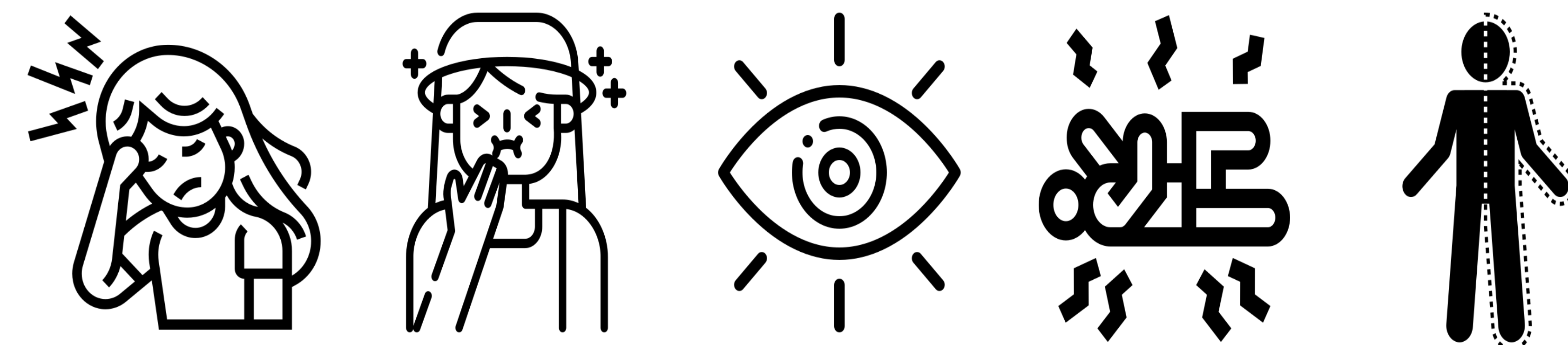


Reversible Cerebral Vasoconstriction Syndrome



Mechanism of Action	• D(1A) dopamine receptor antagonist • 5-hydroxytyptamine receptor 2B agonist
Side Effects	• Hypertension • Coronary vasospasm ▪ Chest pain and ischemia • Cerebral vasoconstriction ▪ Headache, nausea/vomiting, seizure
Contraindications	• Hypertension • Pregnancy

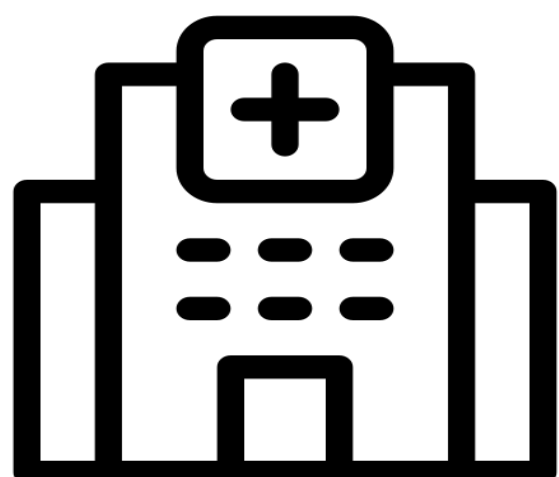
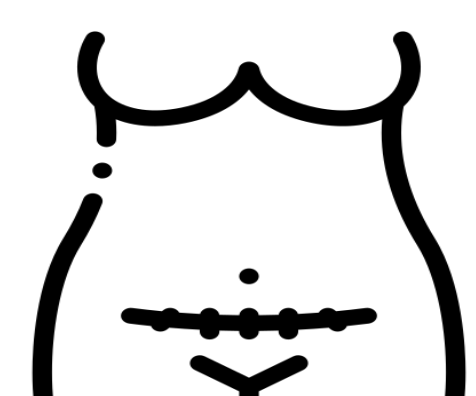
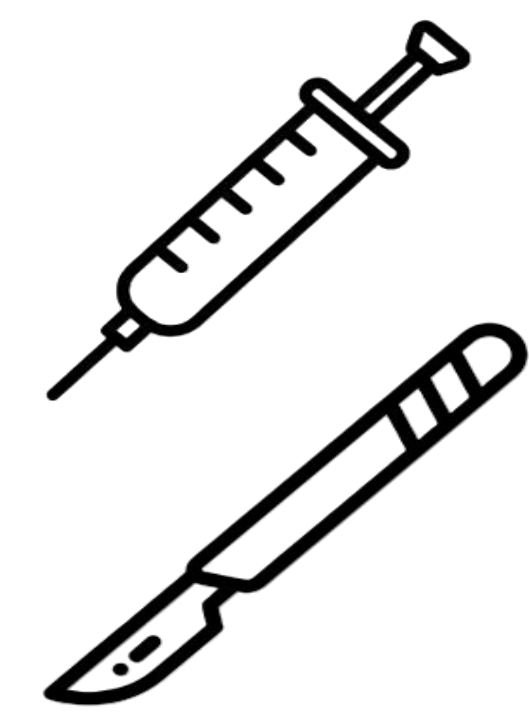
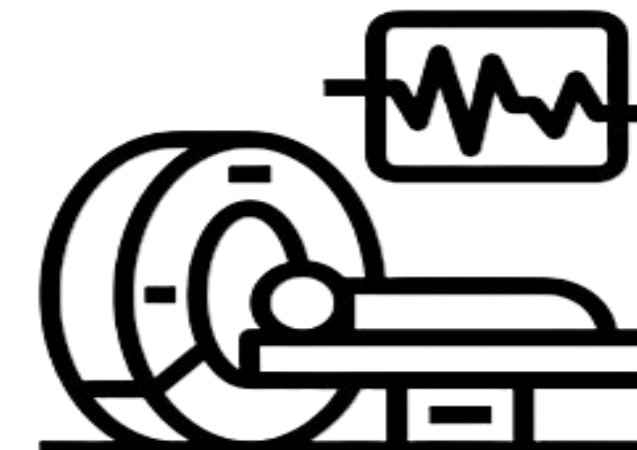
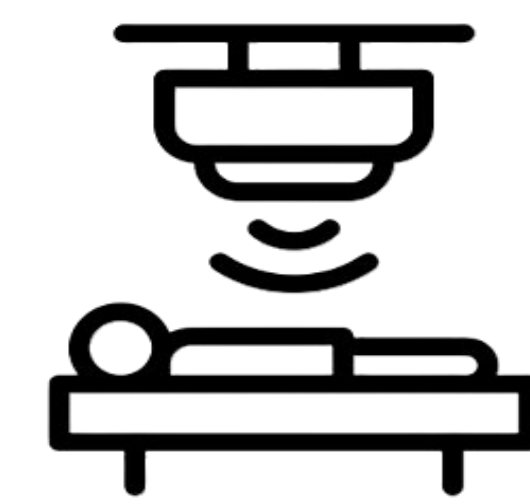
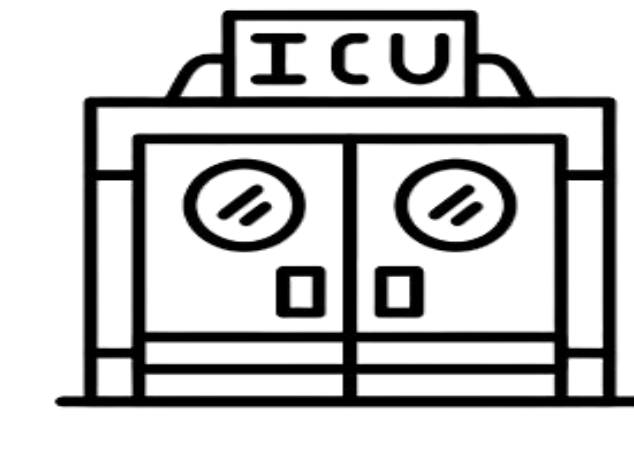
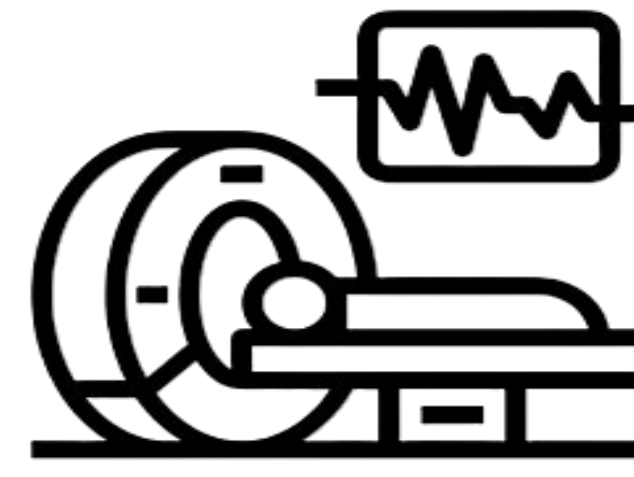
Symptoms



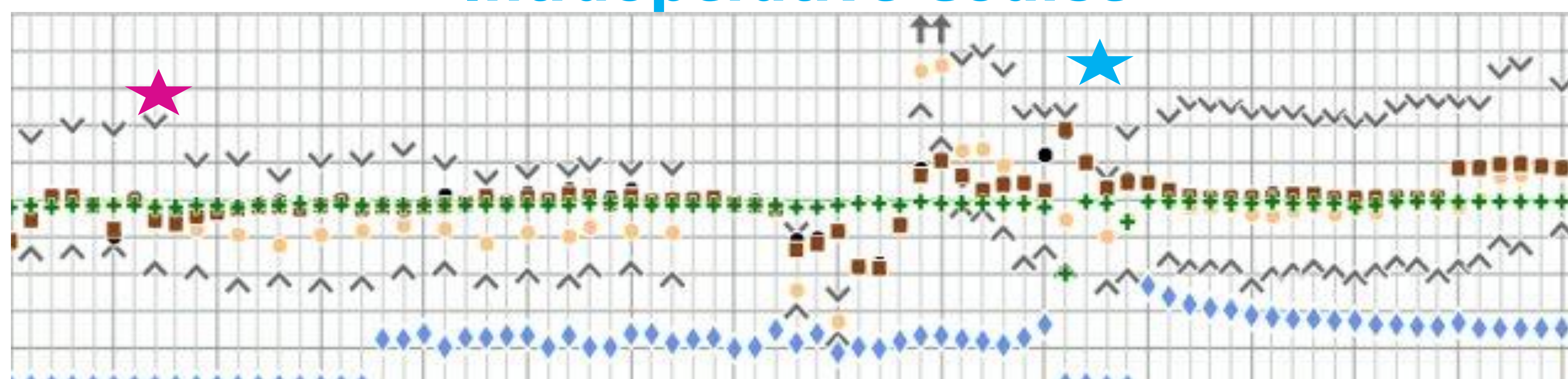
Case Presentation

A 26-year-old G1P0 at 39 weeks 3 days gestation with a history of Graves' Disease presents to L&D for IOL for oligohydramnios

Labor, Delivery, and Postpartum Course

18:46	22:45	07:31	07:35 – 08:14	08:21 – 08:22	08:53	09:09	09:29	09:52	11:16	12:29	POD 0	POD 2	POD 3
													

Intraoperative Course



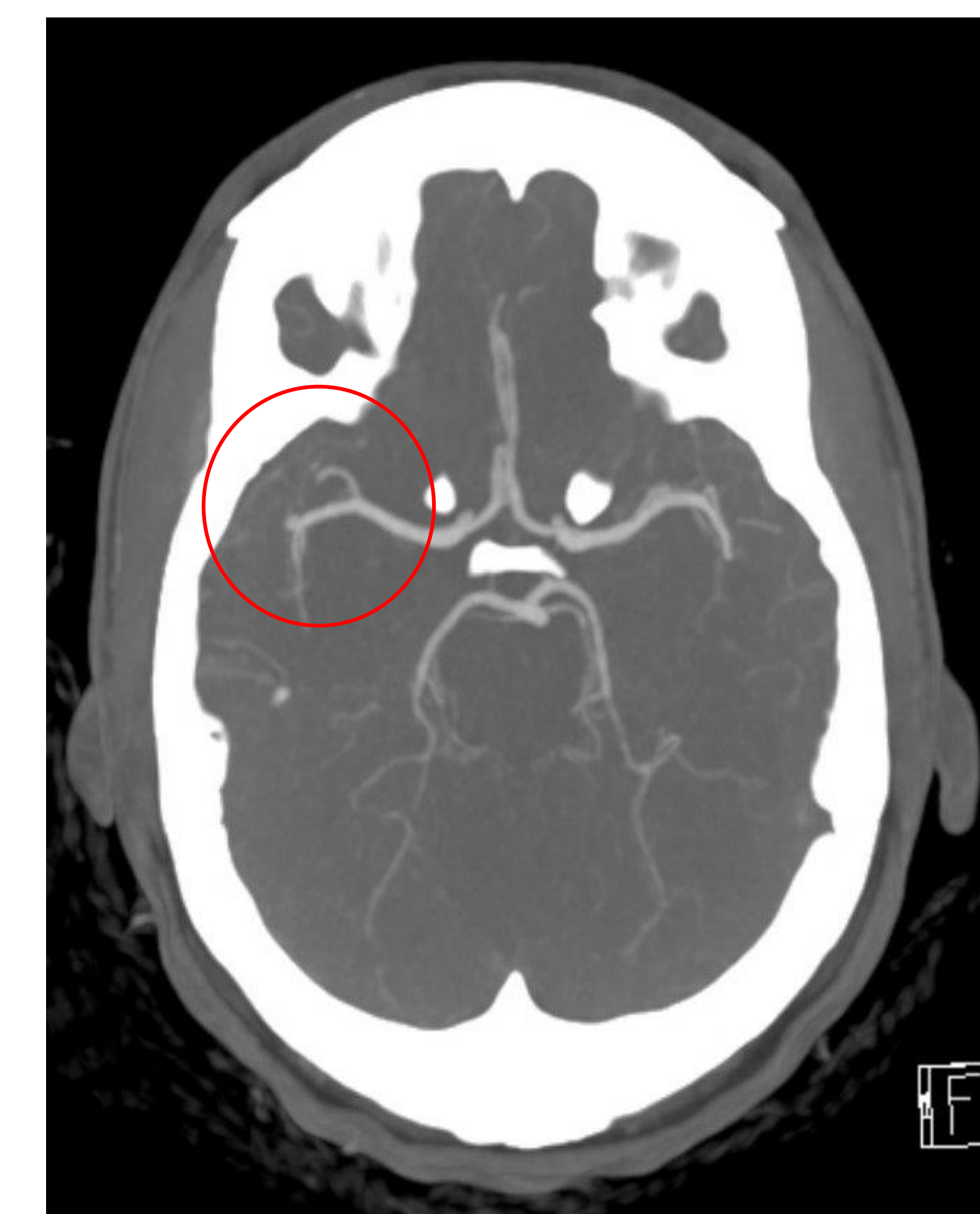
Anesthetic Management

- Hypotension: 350mcg phenylephrine (divided)
- Hypertension: 40mg esmolol, 200mcg NG x3
- Seizure: 4mg midazolam
- Induction: RSI, propofol 200mg, succinylcholine 180mg

Treatment

- Verapamil 20mg to right ICA
- ICU admission
- Anti-epileptic (levetiracetam)
- Follow-up imaging

CTA Head Findings



CTA Head Follow-Up

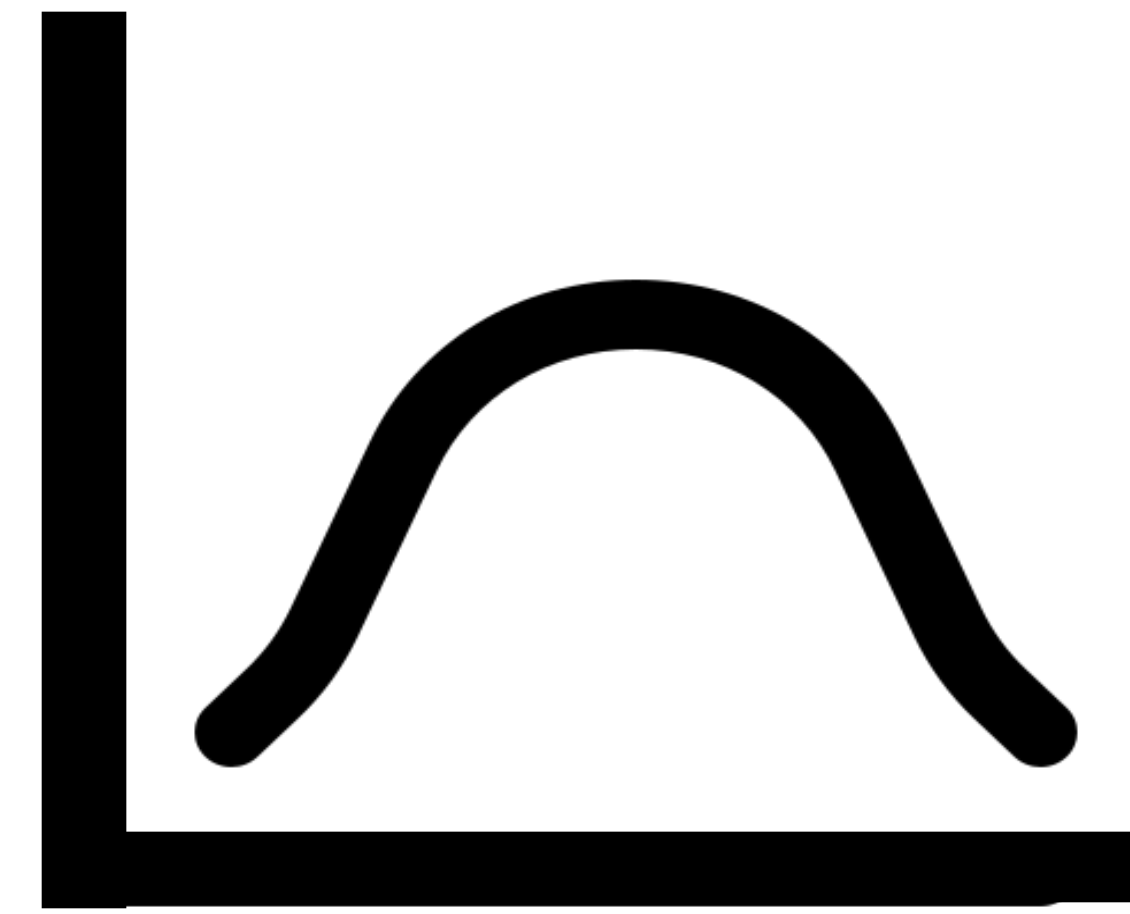


Teaching Points

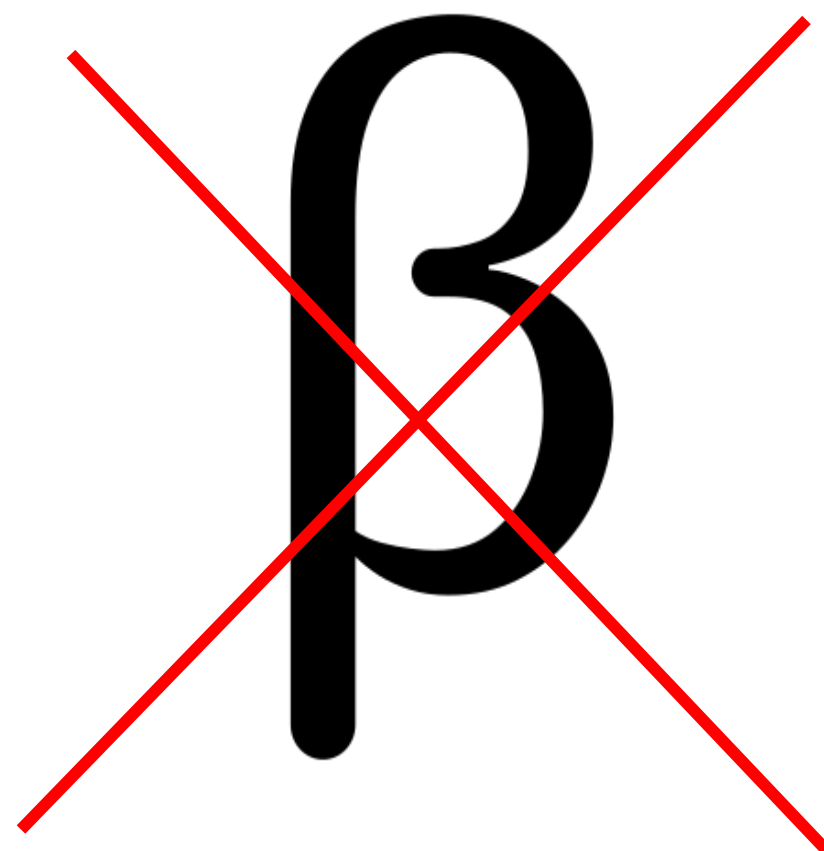
Methylergonovine Maleate Administration

Pharmacokinetics

Peak plasma concentration
0.4 hour (~25 min) after IM
administration



Drug Interactions



Avoid concurrent beta blocker use- may
potentiate vasoconstrictive properties of
ergot alkaloids

Benefits vs Risks

Reduced bleeding



Sequelae of vasospasm

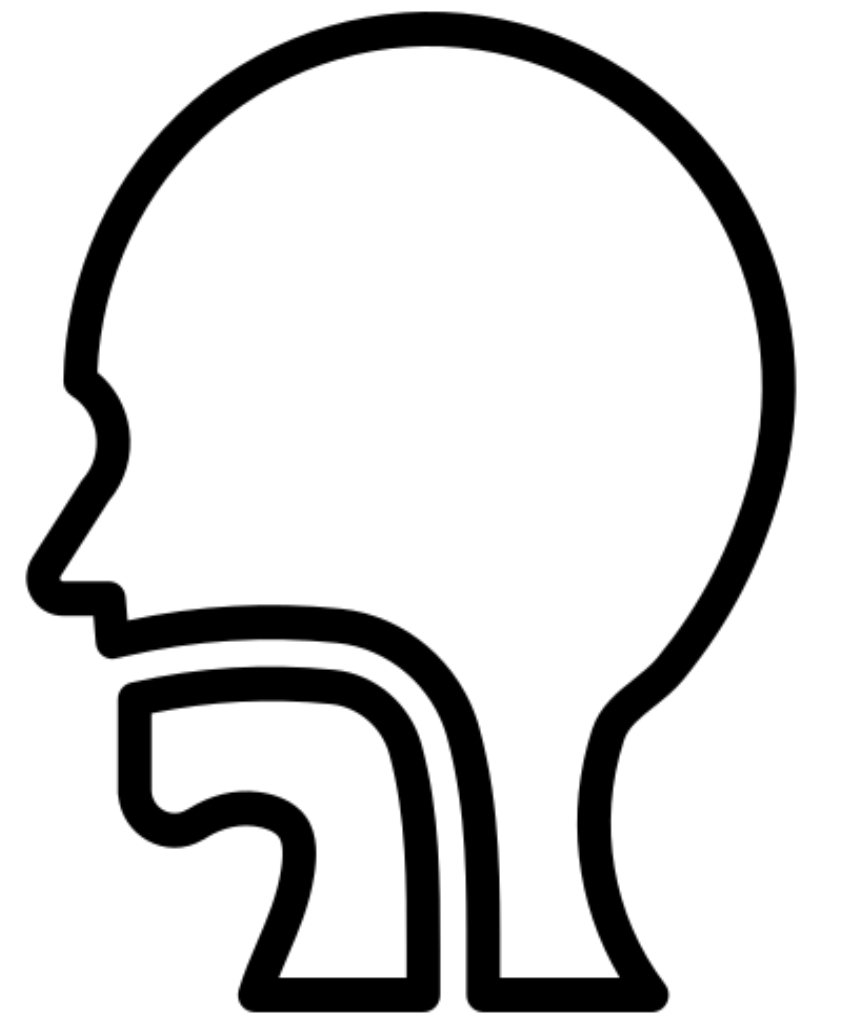
Anesthetic Goals

Prompt Hemodynamic Control

Intra-arterial monitoring

Airway Securement

Intubation and sedation as needed



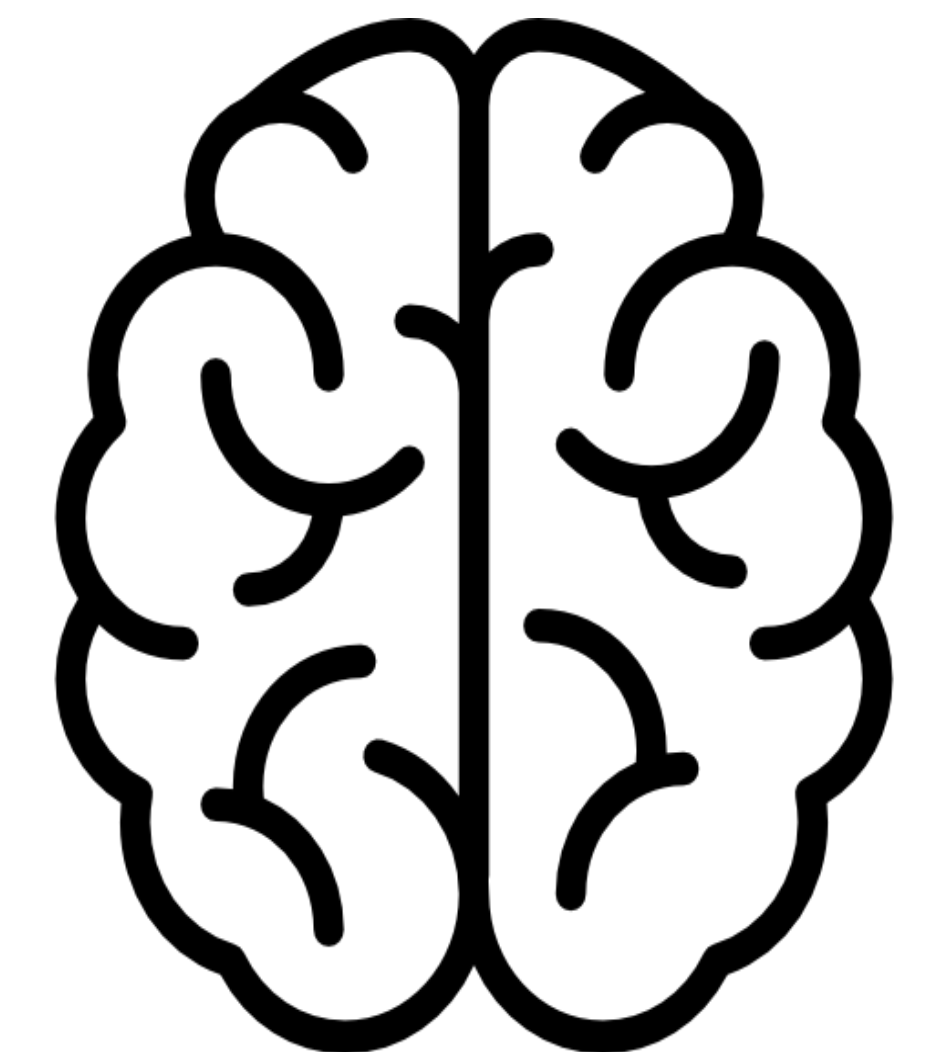
Consultation

Neurology
Interventional Radiology



Imaging

CT head
CTA head and neck



Disposition

ICU admission