Cesarean Delivery for a Patient with Von Hippel-Lindau Syndrome

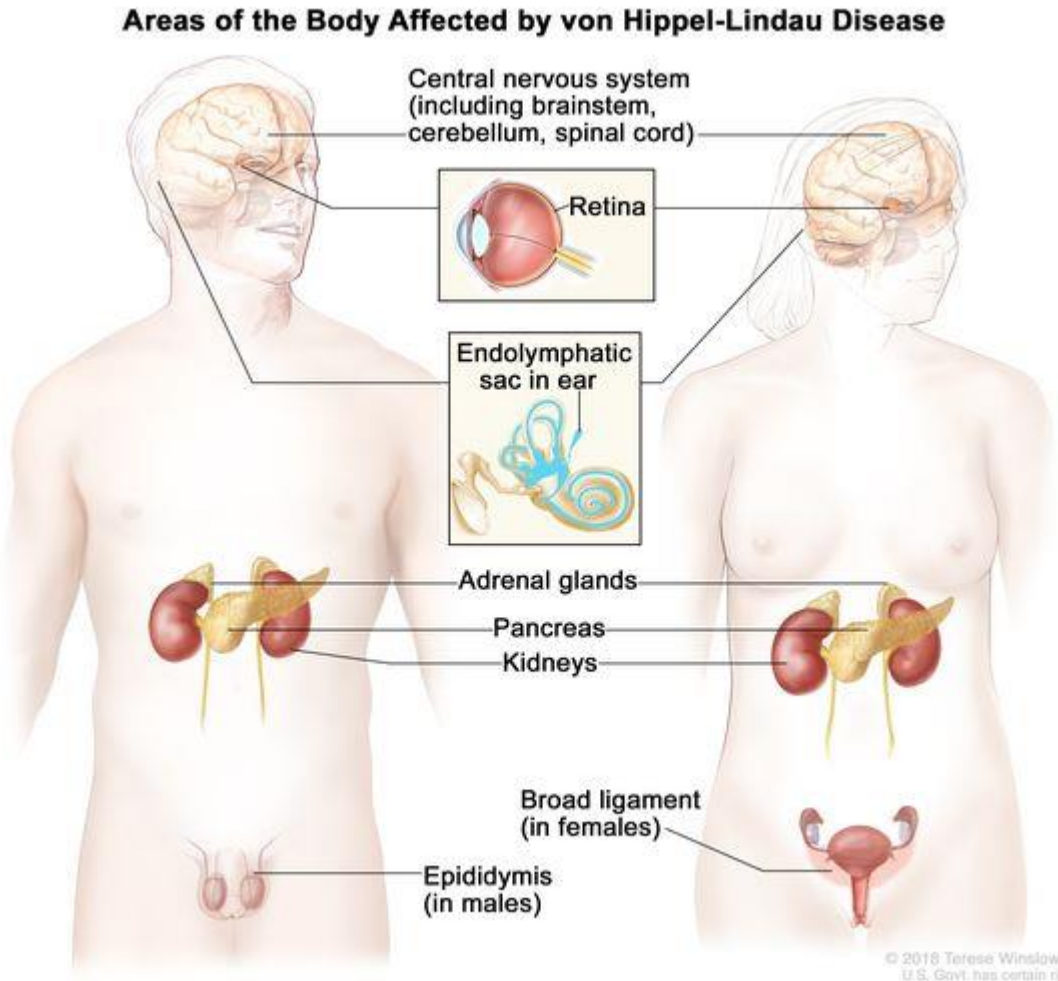
Margaret Lund MD, Blake Caracci DO, James Damron MD, Neva Lemoine MD

SOAP 2025 Annual Meeting
APRIL 30 - MAY 4, 2025
HILTON PORTLAND DOWNTOWN HOTEL • PORTLAND, OR

College of Medicine
Department of Anesthesiology Perioperative, Critical Care and Pain Medicine

Background:

- Von Hippel-Lindau syndrome is an **autosomal dominant** disease caused by mutation of the ***VHL* tumor suppressor gene**, thereby leading to growth of numerous tumors and cysts.
- Characteristic lesions include retinal hemangioblastomas, renal cell carcinomas, pheochromocytomas, **CNS hemangioblastomas**, pancreatic tumors, and endolymphatic sac tumors[1].
- Management of a pregnant patient with Von Hippel-Lindau syndrome requires careful monitoring (due to **risk of hemangioblastoma development and progression** with increased estrogen and total blood volume) and delivery planning[2].



Definition of von Hippel-Lindau syndrome - NCI Dictionary of Cancer Terms - NCI

Cesarean Delivery for a Patient with Von Hippel-Lindau Syndrome

Margaret Lund MD, Blake Caracci DO, James Damron MD, Neva Lemoine MD

SOAP 2025 Annual Meeting
APRIL 30 - MAY 4, 2025
HILTON PORTLAND DOWNTOWN HOTEL • PORTLAND, OR

College of Medicine
Department of Anesthesiology Perioperative, Critical Care and Pain Medicine

24-year-old G2P0010 with known type 1 von-Hippel Lindau. Lesions included posterior fossa and brainstem hemangioblastomas s/p prior resection, bilateral ocular vascular lesions (right eye blindness), pancreatic cysts, and spinal cysts.

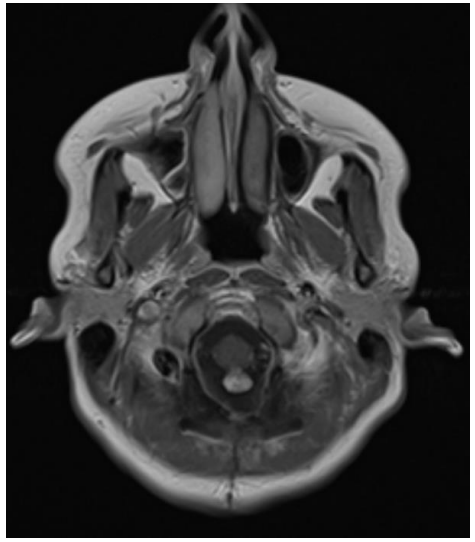
Worsening headaches and new dysphagia prompted repeat scan → significant increase in size of known lesion.

Referred to neurosurgery, who recommended delivery at 37 weeks to permit prompt surgical intervention.

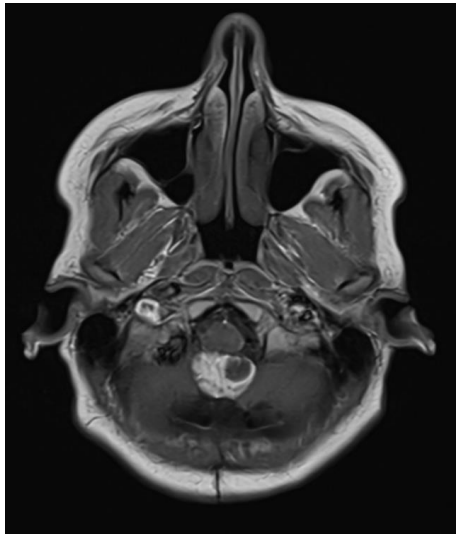
Anesthesia Plan:
- General anesthesia in favor of neuraxial anesthesia
- Preinduction arterial line
- Videoscope intubation
- Multimodal pain control including pre-emergence TAP blocks

Underwent lesion resection postpartum.

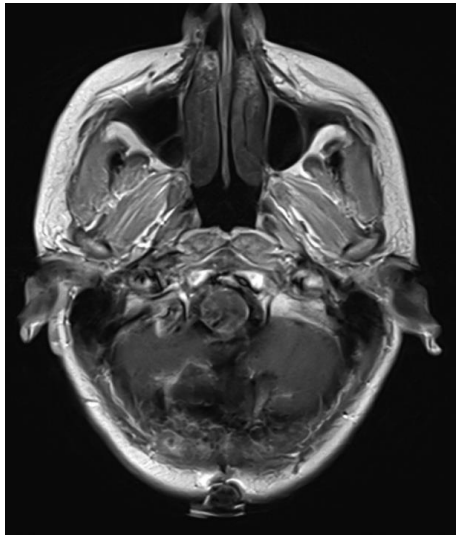
Case Report:



MRI from ~1 year prior to delivery



MRI near time of delivery



MRI post-resection

Cesarean Delivery for a Patient with Von Hippel-Lindau Syndrome

Margaret Lund MD, Blake Caracci DO, James Damron MD, Neva Lemoine MD

SOAP 2025 Annual Meeting
APRIL 30 - MAY 4, 2025
HILTON PORTLAND DOWNTOWN HOTEL • PORTLAND, OR

College of Medicine
Department of Anesthesiology Perioperative, Critical Care and Pain Medicine

Conclusions:

- **Anesthetic management**
  - Broad range of clinical presentations
  - Monitor existing CNS tumors
  - Evaluate for elevated ICP
  - Frequent MRI imaging may be warranted due to growth during pregnancy[2]

TABLE 1. Contraindications to spinal anesthesia.

Absolute Contraindications	Relative Contraindications
• Patient refusal	• Coagulopathy
• Infection at the site of injection	• Sepsis
• Uncorrected hypovolemia	• Fixed cardiac output states
• Allergy	• Indeterminate neurological disease
• Increased intracranial pressure	

Spinal Anesthesia - NYSORA

References