# Screening and Anesthetic Management of Hereditary Hemorrhagic Telangiectasia in Parturients

Mount Sinai West

SOAP Society for Obstetric Anesthesia and Perinatology

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## BACKGROUND

- Hereditary hemorrhagic telangiectasia (HHT)is a vascular dysplasia characterized by telangiectasias and arteriovenous malformations (AVMs) that affects 1 in 5000 people.
- Occurs commonly in the lung (40%) and rarely in the spine (<1%).[1]
- Pregnancy can worsen AVMs 2/2 increased blood volume % CO.
- Guidelines recommend screening, multidisciplinary planning, and risk assessment.[2]
- HHT raises concern for spinal AVMs and neuraxial bleeding, while general anesthesia carries risk from pulmonary AVM rupture and right-to-left shunting.[1,2]
- **We report two patients with HHT and review evaluation, anesthetic management, and outcomes.**

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## CASE DESCRIPTIONS

- **32-y-o G1P0 (IVF) PROM.**
- PMH: **HHT**, **pulmonary AVM** embolization (2022) w/ stable residual AVM's on CTA (2024). MRI brain (2022) & spine (2025) MRI (-) negative. History of mild epistaxis.
- **Uncomplicated (CSE)** w/ saline LOR, in-line air filters.
- Urgent cesarean delivery for category II tracing w/o hemorrhagic or neurologic complications. DC POD 3.

- **37-y-o G2P1in labor.**
- PMH: **HHT, two pulmonary AVM** embolizations (2018), MRI brain (2017) and lumbar spine (2016) (-). Intermittent epistaxis.
- Prior uncomplicated CSE (2021 now **declines neuraxial analgesia** despite clearance.
- **Uncomplicated vaginally delivery** w/o complications or postpartum hemorrhage.

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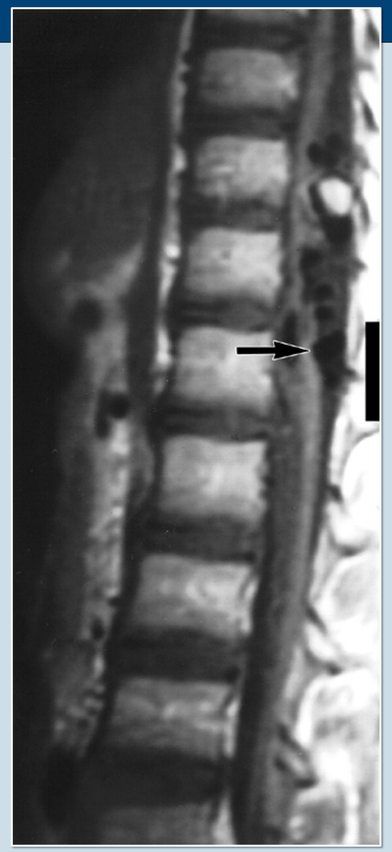
## DISCUSSION



- HHT creates high-stakes anesthetic decisions due to pulmonary shunting and possible neuraxial vascular lesions.
- These cases support risk-stratification using focused history, prior imaging review, pulmonary/CNS AVM assessment, and multidisciplinary planning.
- When neuraxial anesthesia is used, saline loss of resistance to reduce paradoxical embolism, strict avoidance of intravascular air, and early analgesia may mitigate preventable risk.[3]
- Standardization promotes safety and provides practical teaching points.