Anesthetic Management of EXIT Procedure at Our Facility for a Fetus with Congenital Neck Teratoma

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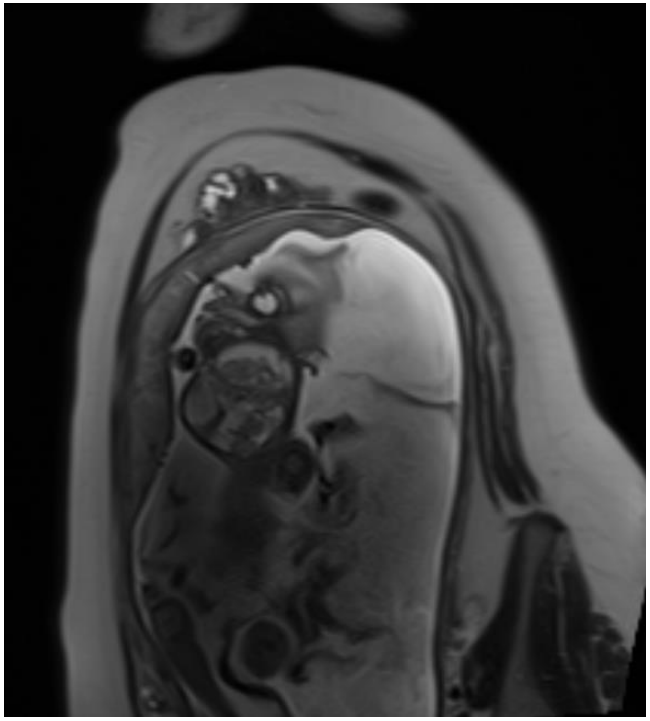
Background

- **EXIT (Ex-Utero Intrapartum Treatment)** procedure is a surgical technique where the fetus is partially delivered, an airway is established, followed by separation from the placenta
- Serves as a critical intervention for fetuses with life-threatening airway obstructions
- Most common indication in a cervical neck mass
- Other indications thoracic mass, congenital high airway obstructive syndrome (CHAOS), congenital diaphragmatic hernia
- Imperative to maintain uteroplacental circulation while securing the airway and fetal surgery through controlled uterine hypotonia

Case

- 33 yo F G2P1, fetal neck mass on 22 weeks US
- 31 weeks fetal MRI showed right lateral neck mixed cystic and solid mass measuring 80x87x75 mm compressing cervical/upper thoracic trachea
- Multidisciplinary team: anesthesiology, obstetrics, neonatology, otolaryngology
- Spinal with fentanyl and duramorph
- Induction: propofol and fentanyl
- Bilateral TAPS blocks
- Uterine Relaxation: 2-3 MAC sevoflurane with intravenous nitroglycerin infusion on standby
- Fetal head, neck arms delivered through uterine incision
- Fetal airway secured via fiberoptic laryngoscopy
- Umbilical cord clamped and fetus fully delivered
- APGAR scores 1 minutes: 5, 5 minutes: 7
- Inhalation anesthetic transitioned to TIVA with propofol and remifentanil infusion



Discussion

- Multidisciplinary team: anesthesiology, obstetrics, neonatology, otolaryngology, nurses
  - Detailed anesthetic plan to optimize both maternal and fetal outcomes
  - Defining roles
  - Equipment preparation
  - Clear communication
  - Develop protocols
- Program expanded with completion 2nd EXIT procedure for Fetoscopic Myelomeningocele repair