



EXIT: A Critical Intervention in Obstetric Delivery Complicated by Fetal Cystic Hygroma

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I. OBJECTIVE

To determine the role of Ex-Utero Intrapartum Treatment-to-airway (EXIT-to-airway) as a specialized procedure that maintains fetal airway and circulation while securing an alternative airway before the completion of delivery.

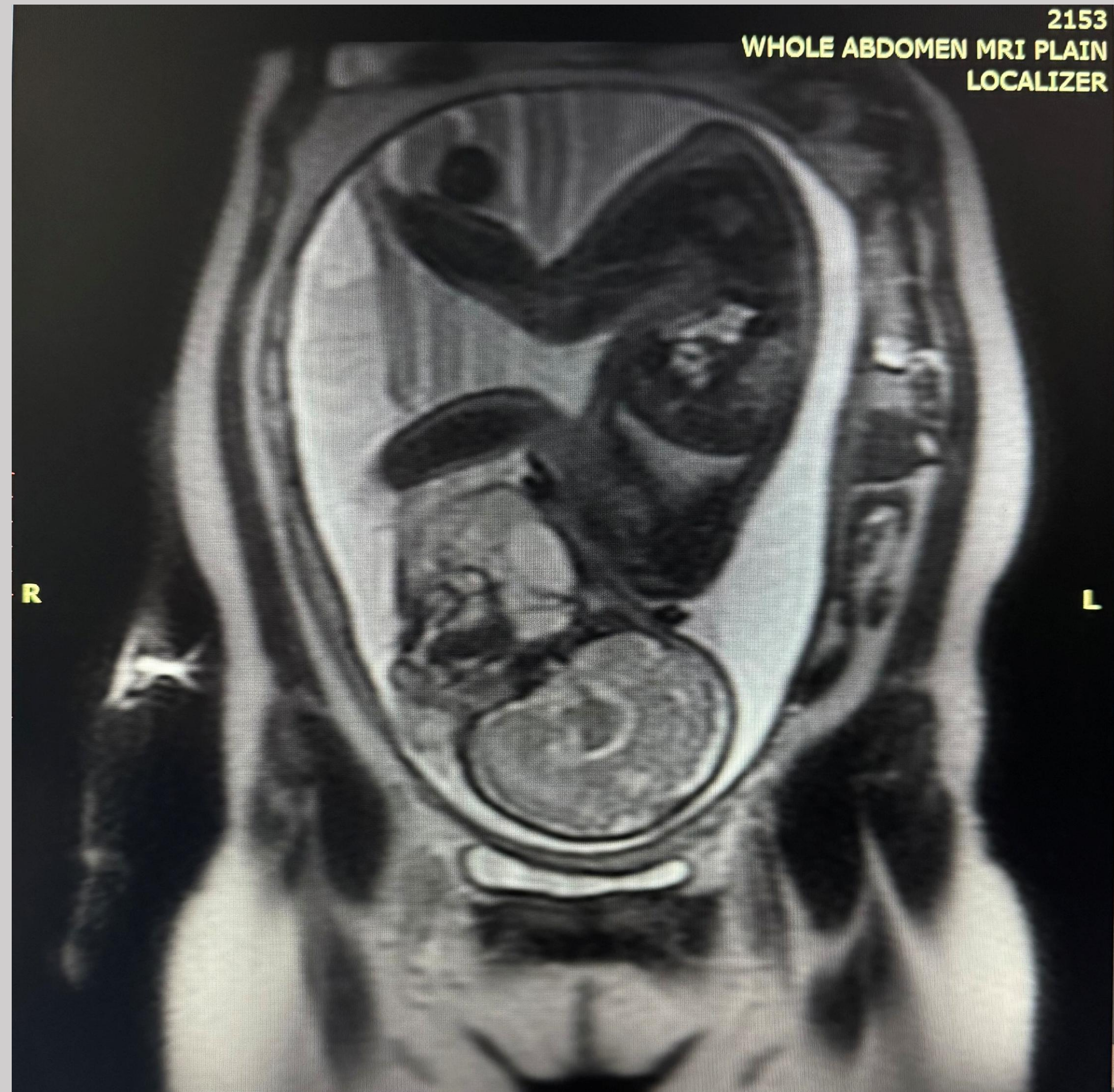


Figure 2: Abdominal MRI showing a heterogenous complex, predominantly cystic, arising from the midline anterior neck region of the fetus. With a diameter of 11.2x 14.8 x 9.7cm

II. CASE REPORT

This is a case of a 30-year-old Gravida 2 Para 1 (1001) with an incidental ultrasound finding of a fetal anterior neck mass on routine prenatal screening at 29 weeks of gestation, measuring approximately 10.9 x 9.5 x 9.6 cm, with cystic components infiltrating the surrounding tissues, and a probable consideration of lymphangioma.

At 37 weeks, the patient successfully underwent the EXIT-to-airway surgery with the help of various subspecialty services, with the following outcome: term, live, baby girl, birthweight of 3200 grams, APGAR scores of 5 and 8, and a Ballard score of 38 weeks, Appropriate for Gestational Age, with a 14.1 x 11.05 x 12.21 cm anterior neck mass, suggestive of cystic hygroma.

III. DISCUSSION

EXIT-to-airway is a life-saving procedure recommended for fetuses with congenital airway obstructions, as seen in this case where a large neck mass was detected during a prenatal ultrasound with a 14.1 x 11.05 x 12.21 cm anterior neck mass, suggestive of cystic hygroma, which increases the potential for fetal airway obstruction. This procedure requires a multidisciplinary team, as seen in the case, which allows a multistage cesarean delivery under deep inhalational anesthesia and where a fetal airway was secured while maintaining uteroplacental blood flow and gas exchange.

IV. CONCLUSION

As prenatal diagnostic capabilities and surgical expertise improve, the EXIT procedure is an essential intervention for managing congenital airway obstructions in fetuses, providing a safe pathway for securing the airway before complete delivery. It underscores the importance of multidisciplinary coordination, meticulous planning, and timely intervention in optimizing outcomes for high-risk pregnancies. This application offers hope for better neonatal outcomes in similar cases and contributes to the growing body of evidence supporting the role of EXIT in managing complex congenital anomalies.

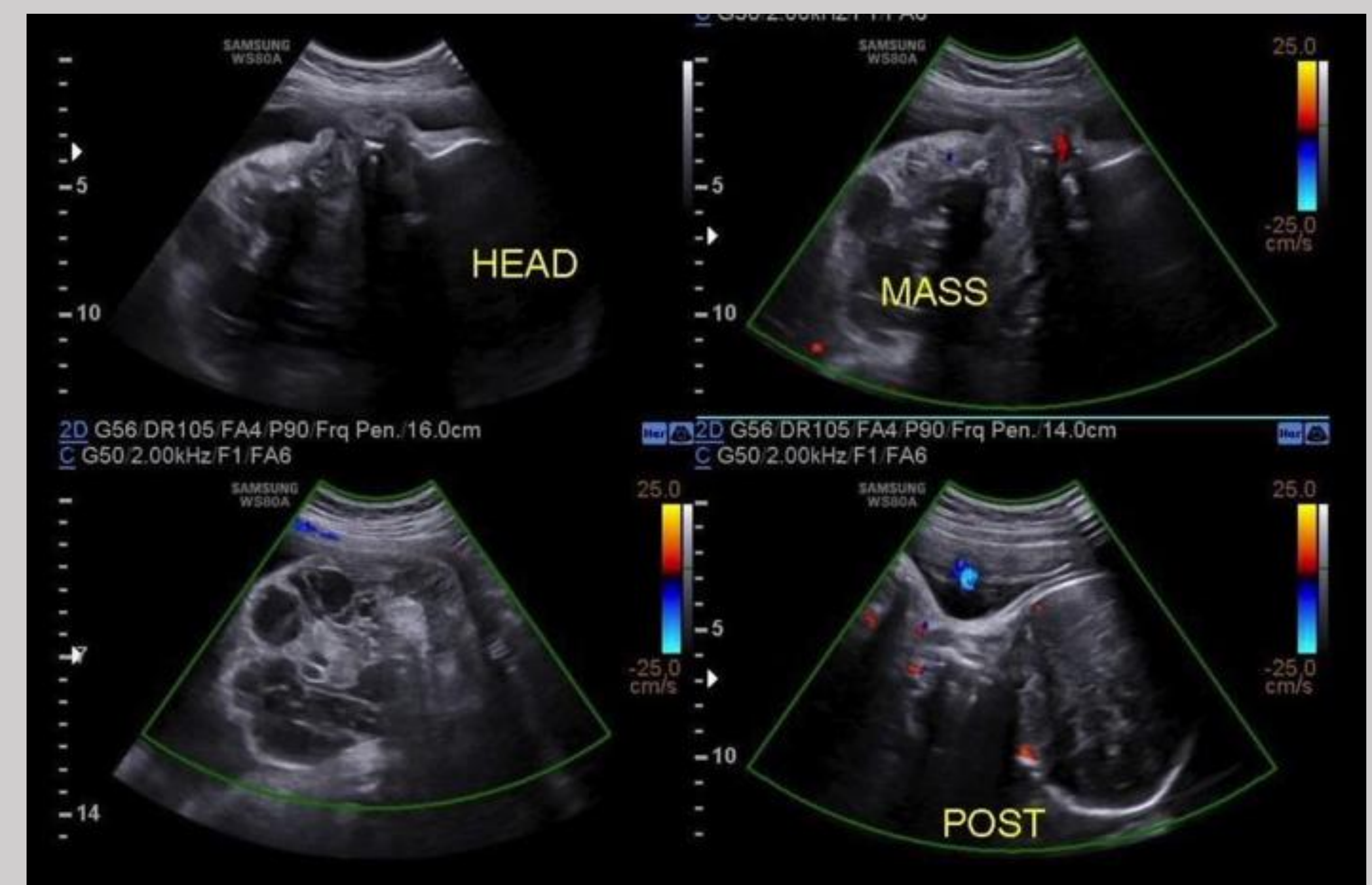


Figure 1: Pelvic Ultrasound at 36 3/7 weeks age of gestation showing anterior neck mass between the fetal lower jaw and upper chest measuring 14.1 x 11.05 x 12.21 cm



Figure 3: Actual image of the neonate during intubation by the anesthesia service with simultaneous monitoring of fetal heart rate by the ultrasound service.