

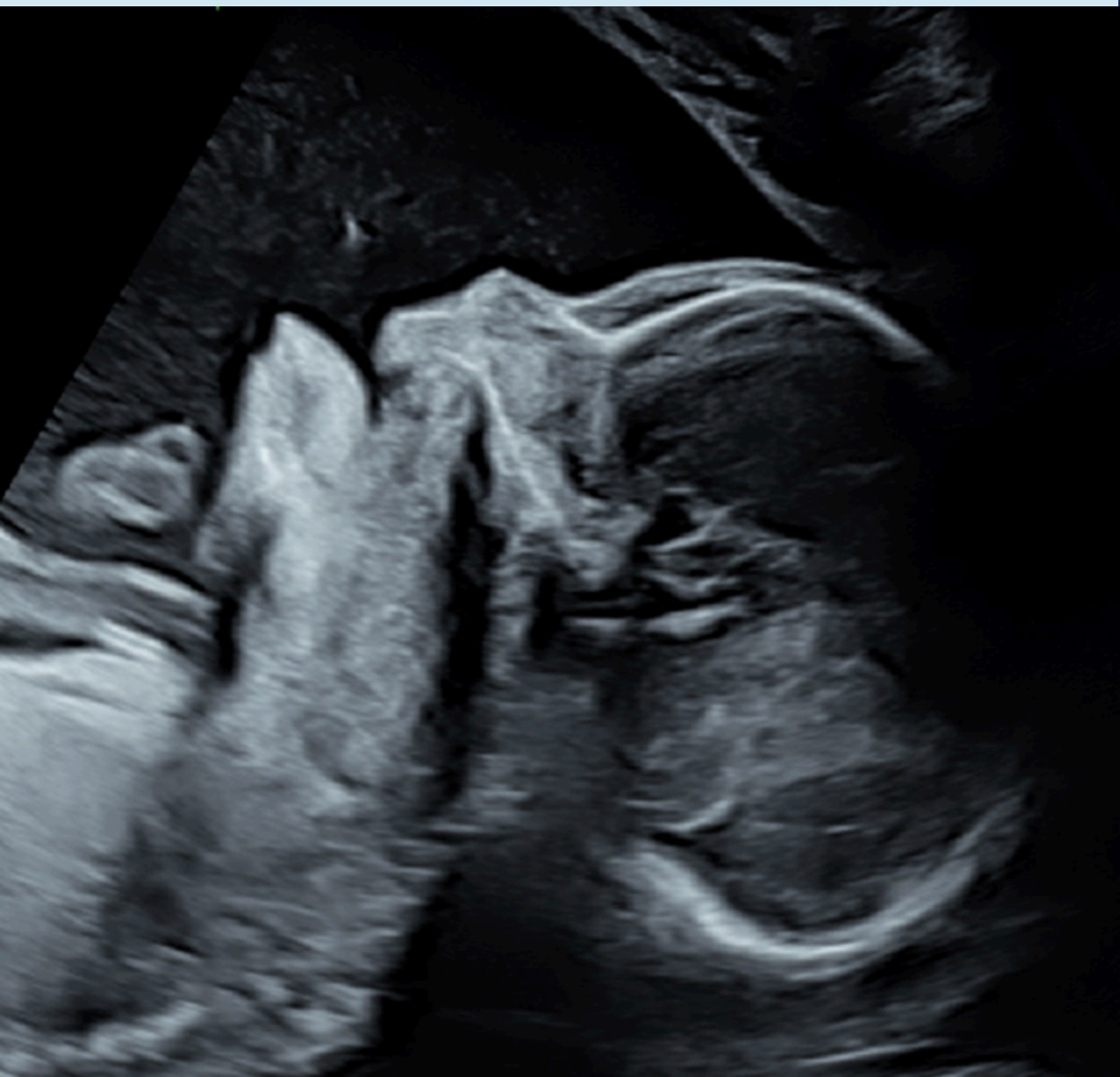
AUTHORS
<i>Zoe Byrne, Sonja Brennan, David Watson</i>

Prenatal Diagnosis of a Congenital Pharyngeal Teratoma

AFFILIATIONS
<i>Townsville University Hospital - Maternal Fetal Medicine Unit</i>

01. Introduction

- Oropharyngeal/nasopharyngeal teratomas arise from pluripotent germ cells capable of differentiating into all three embryonic layers [1,2,3].
- Rare: ~6–10% of congenital teratomas; estimated incidence 2.5–5 per 100,000 live births; major risk is airway obstruction with high perinatal morbidity/mortality [4].
- Advances in prenatal imaging (high-resolution ultrasound, fetal MRI) improve early detection and characterisation [5].
- Antenatal sonographic signs—polyhydramnios and mass effect on airway/oesophagus—flag perinatal risk [2].
- Reported strategies include EXIT at delivery [2] and, in very select cases, operative fetoscopy in utero [6].
- Definitive treatment is surgical excision; complex cases (e.g., cleft palate, intracranial extension) may need staged surgery; late recurrence has been described [7,3].



02. Objective

- Patient: 28-year-old primigravida, low-risk NIPT, no significant history.
- 20-week scan: Left-sided oropharyngeal mass displacing the fetal tongue.
- 21+6 weeks: Heterogeneous solid lesion 35 × 30 × 26 mm, minor vascularity, tongue displaced outwards/right.
- Associated findings: mild polyhydramnios (SDP 8.4 cm), thickened nuchal fold 6.2 mm, early cranial skin oedema, cervical funnelling; Dopplers normal.
- 12-week scan: Retrospective review normal → rapid intrauterine growth inferred.
- Endocrine/genetic: Maternal thyroid normal/antibody-negative (goitre excluded); fetal microarray normal.
- Counselling & plan: Risks discussed—progressive airway obstruction, potential EXIT/surgical needs, cosmetic and malignancy considerations.
- Outcome: Feticide at ~22 weeks' gestation; induction and vaginal delivery of a stillborn female (580 g). Placenta unremarkable.
- Pathology: Pharyngeal mass with predominantly benign tissue and immature elements, raising potential malignant risk.

03. Imaging

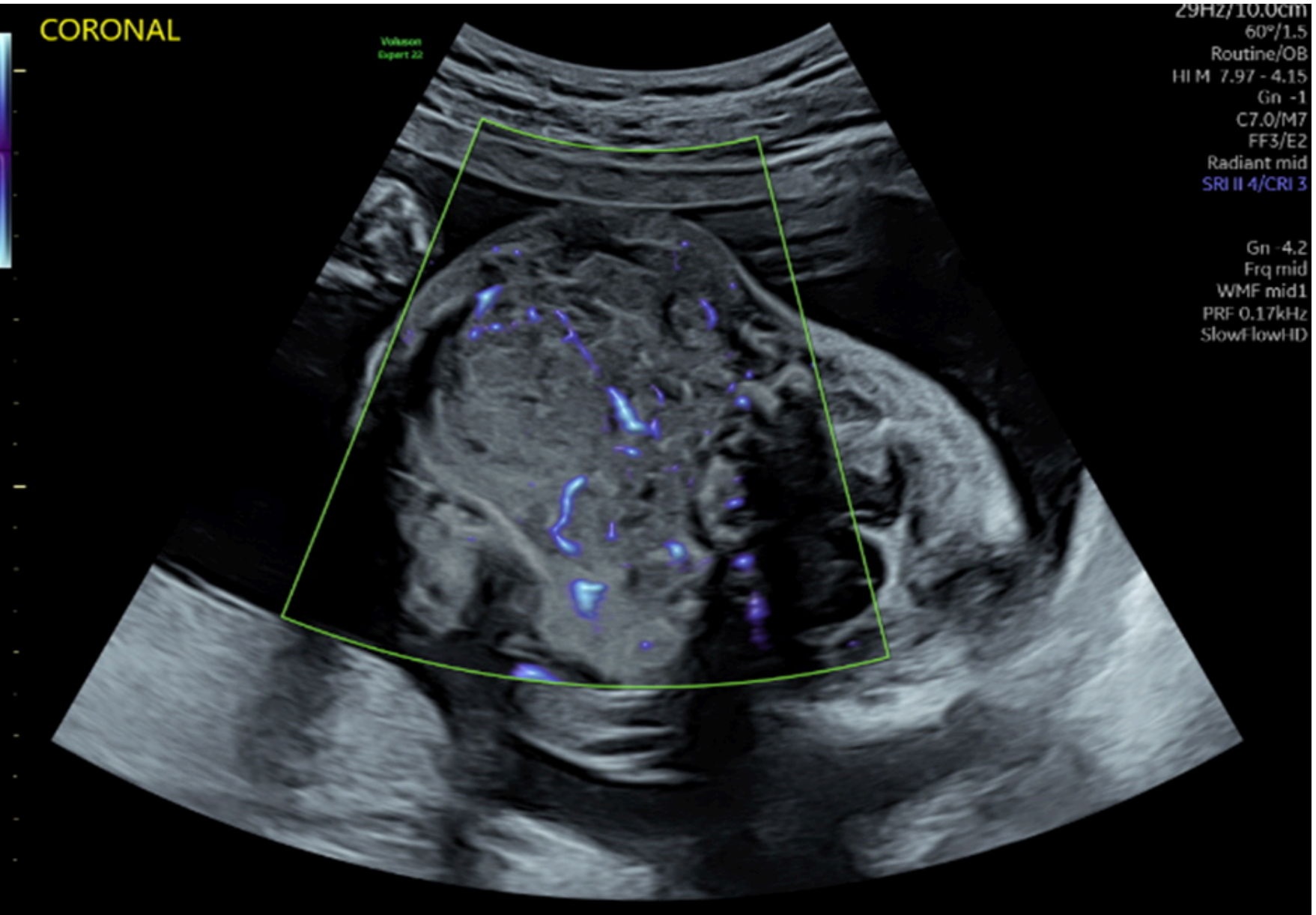
Why ultrasound/MRI matter: define size, vascularity, extension, and airway/oesophageal compromise to guide perinatal planning [5].

Key differentials considered: lymphatic malformation, encephalocele, rhabdomyosarcoma [7].

Prognostic sonographic markers present here: polyhydramnios, persistent tongue protrusion/open mouth (impaired fetal swallowing) → predictors of airway and feeding problems if ongoing pregnancy [2].

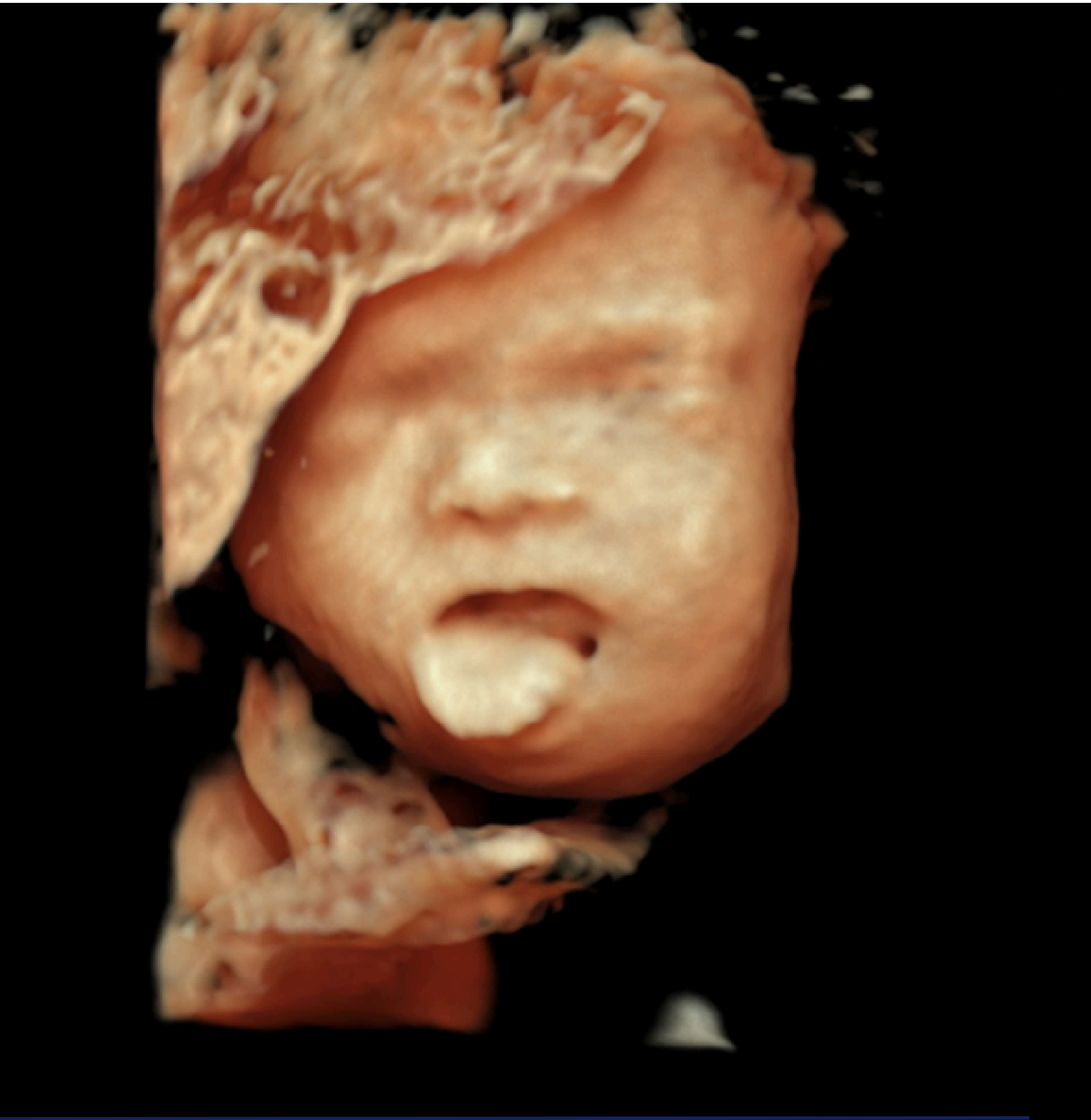
05. Why this Case Matters

- Early mid-trimester detection (20 weeks), earlier than many reports (often third trimester) [6].
- Documented rapid growth over an 8-week interval → underlines value of serial imaging for dynamic risk assessment [5].
- Polyhydramnios + mass effect are practical second-trimester red flags for difficult perinatal airway/feeding outcomes [2,4].
- Histology with immature elements reinforces need for vigilance regarding malignant potential and for long-term follow-up when infants survive [3].



04. Management

- Rapid enlargement between 12 and 20 weeks plus evolving mass effect suggested worsening airway risk and challenging antenatal/perinatal course.
- If pregnancy continued, options would include serial surveillance ± MRI [5], multidisciplinary planning, and EXIT for airway at delivery [2]; highly selected centres have reported fetoscopic debulking in utero [6].
- Postnatal pathway (if viable): surgical excision tailored to size/site/invasion; staged repairs when associated anomalies present [7,3]; successful resections of hard-palate teratomas reported [8].



06. Take Home Messages

- Think airway early. Polyhydramnios and tongue displacement/open mouth should trigger escalation and multidisciplinary planning [2,4].
- Track growth. Rapid interval enlargement between scans can reshape prognosis and delivery planning [5].
- Plan deliberately. EXIT and surgical strategies exist but are highly individualised; rare fetal interventions are centre-dependent [2,6,7].

07. References

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