Fetal Neck Tips + Tricks

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Neck: Tips + Tricks

Masses

- Germ Cell Tumor
- Vascular Anomalies
- Goiter

Additional Considerations
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Masses

- *Germ Cell Tumor*
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Masses

• *Germ Cell Tumor*

• *Vascular Anomalies*
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Masses

• **Germ Cell Tumor**

• **Vascular Anomalies**
  • Low flow: venous, *lymphatic malformations*
  • High flow: hemangioma, Kaposiform hemangioendothelioma
Kaposiform hemangioendothelioma
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Masses

• Germ Cell Tumor
• Vascular Malformation
• Goiter

Additional Considerations
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**Thymic**

- Cyst

**Other, even more rare:**

**SOLID:** fetus-in-fetu, myofibroma, congenital fibrosarcoma, neuroma, neuroblastoma

**CYSTIC:** cervical meningomyelocele, branchial cleft cyst
Thymic cyst
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No matter the pathology, *practically we are most interested in the airway*
The tracheoesophageal displacement index (TEDI)
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Preliminary results in a small series suggest that polyhydramnios or a TEDI > 12 predict moderate to severe airway management difficulty at birth (p=0.06).

There was no correlation of intubation difficulty with tumor size.

A TEDI <12 measured near delivery is reassuring.

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Masses

• Germ Cell Tumor
• Vascular Malformation
• Other

Additional Considerations
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Nuchal soft tissues

Great vessels
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*Nuchal soft tissues*

5 mm maximum at level of posterior fossa
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**Nuchal soft tissues**

5 mm maximum at level of posterior fossa

**Great vessels**

Consider assessing RIJV if the fetus may be a candidate for neonatal ECMO (as with CDH)
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Summary

1. Giant neck masses in the fetus are teratomas if centric and firm, and LMs if infiltrative and squishy
2. Goiter looks like a big thyroid
3. Consider thymic cyst if unilocular
4. Consider MR to evaluate the airway, though if the mass is teratoma or there is polyhydramnios, an EXIT is preferred anyway
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