



# Difficult Decisions: Fetal Intervention in Twin Gestation

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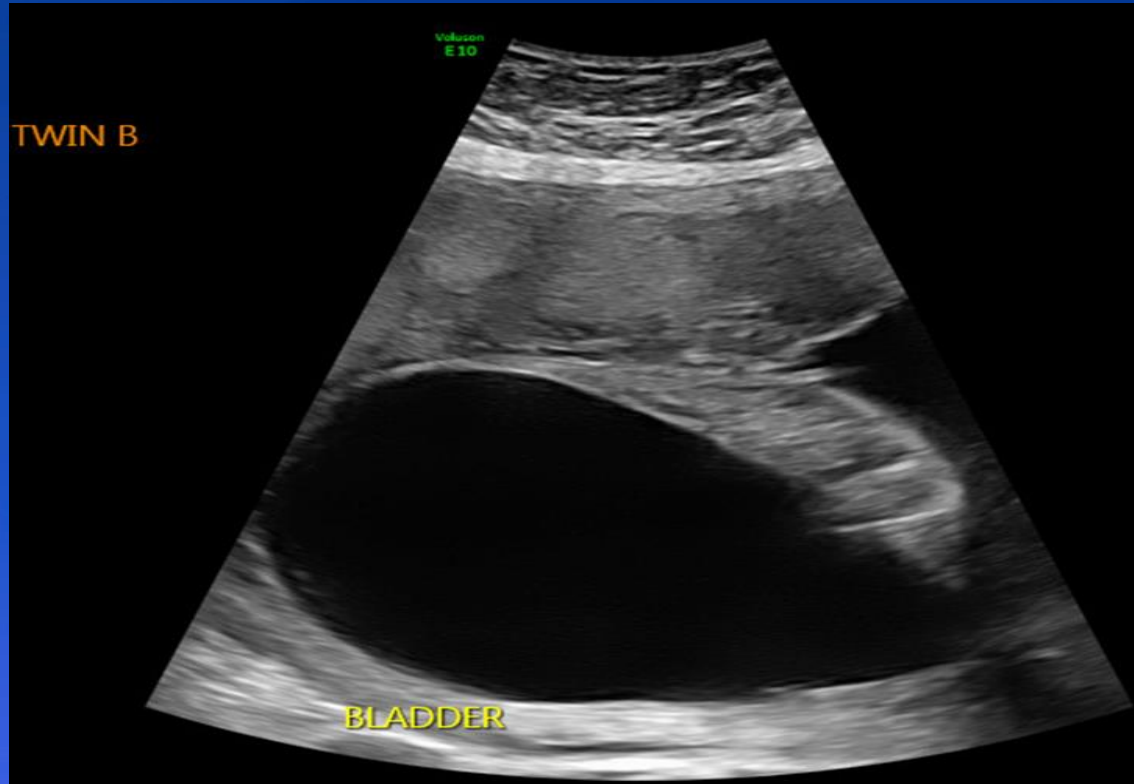
# Disclosures

- I have no disclosures.

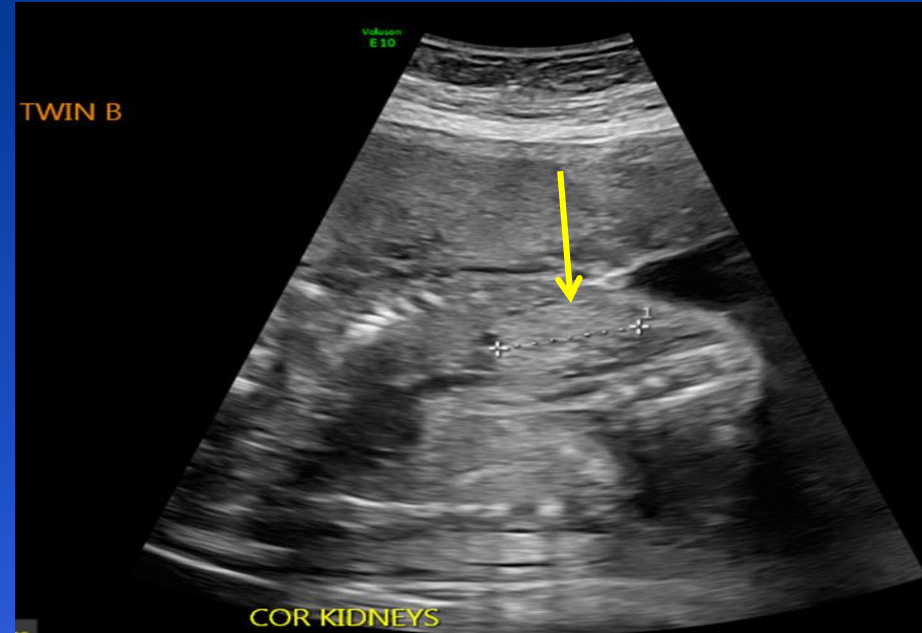
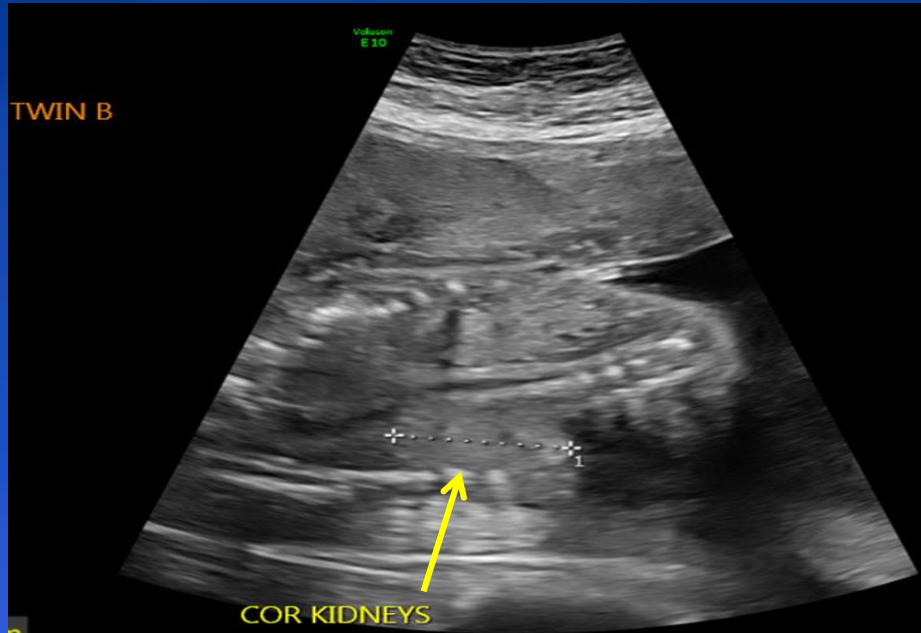
# Case Presentation

- 36yo G4P2103 woman with monochorionic diamniotic twin gestation
- Obstetric history: gestational diabetes and pre-eclampsia in prior pregnancies; cervical shortening
  - negative for congenital abnormalities with other three children
- Family History: negative for urologic abnormalities or kidney disease

# 20 week ultrasound

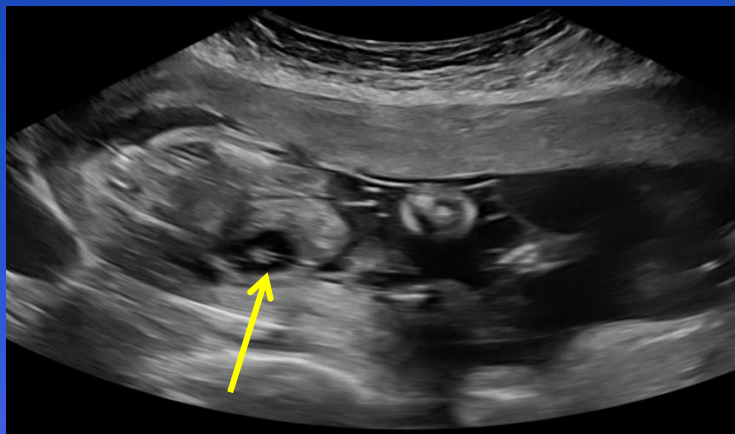


# 20 week ultrasound



# Fetal Management

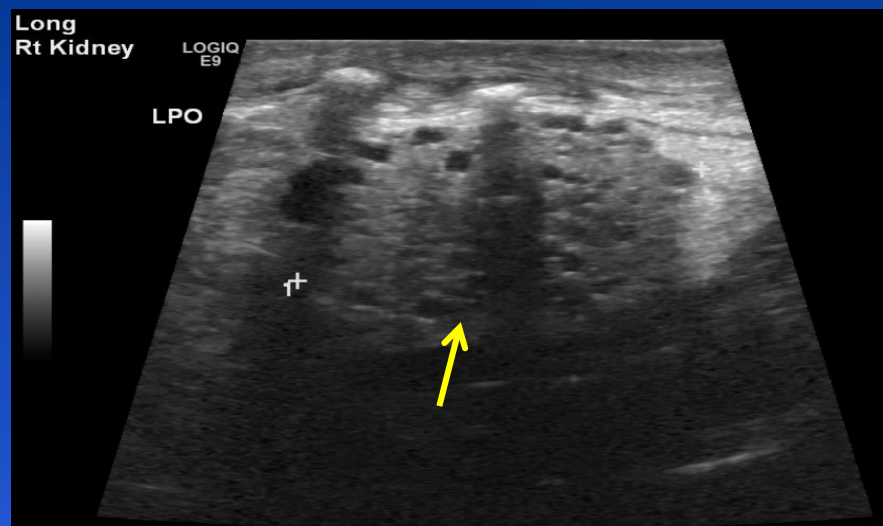
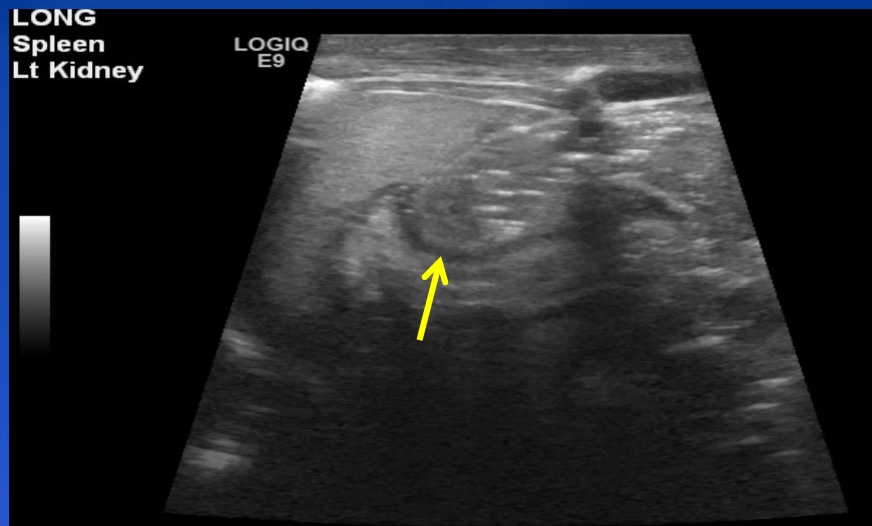
- Vesicocentesis x 2 at 20w5d and 21w1d
  - Beta 2 microglobulin >20,000
  - Chromosomal FISH/microarray studies negative
- Vesicoamniotic shunt placed at 21w6d



# Birth Events

- C-section at 30w1d due to pre-eclampsia with severe features
- Twin B was intubated for respiratory distress, anuric since birth
- Additional Exam Findings:
  - Weight: 1090 g
  - Imperforate anus
  - Sacral agenesis
  - Shunt in good position

# Postnatal Renal Ultrasound





# Postnatal Events

- Day of Life 2
  - Failure to pass 3.5Fr feeding tube through urethra
  - Diverting colostomy and mucous fistula creation
- Day of Life 4
  - Withdrawal of care in setting of rising creatinine and kidney failure

# Challenges

- Vesicoamniotic shunt to reduce risk of pulmonary hypoplasia and further renal dysfunction in Twin B
  - Shunt increases risk of preterm labor in setting of cervical shortening
  - High risk of fetal demise of Twin B
  - Risk of morbidity to Twin A due to shared blood supply
- Inability to perform peritoneal dialysis or hemodialysis due to size of Twin B

# Conclusions

- Stresses importance of:
  - multidisciplinary discussions with fetal care team for prenatal intervention
  - involvement of palliative care early postnatally to help discussions regarding intervention versus comfort care

Questions?

Thank you!

@BLFindlay

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