3rd Trimester Case Study

Chris Winston
Providence Hospital Southfield
Ultrasound Student
History

- 32 y/o
- G2 P1 A0
- SGA and growth
- 32 2/7 wks
- Pt had normal 18 wk scan
Normal FHR
Abdominal Ascites
Abdominal Ascites

- Ascites is always abnormal
- Fluid collects between two leaves of the unfused omentum
- Common sonographic finding in hydrops
- When associated with hydrops, integumentary edema will often be observed
Abdominal Ascites
Subcutaneous Edema
Subcutaneous Edema

- When seen in the fetus, commonly associated with hydrops fetalis
- Soft tissue wall thickening of >5mm
- Often seen with polyhydramnios
Frontal Bossing
Bilateral Lung Hypoplasia w/multiple cystic masses
Pulmonary Hypoplasia

- Caused by decrease in number of lung cells
- Results in small, inadequately developed lungs
- Decrease in lung cells can be caused by masses in thoracic cavity, such as with CCAM
Cystic lung mass
Con’t
Largest cyst: 5.6 x 3.8 x 4.6 cm
Polyhydramnios

- Max Vertical Pocket: 106 mm
- AFI: 274 mm
Absent End Diastolic Flow
LGA due to edema

- BPD: 89.5 mm
- OFD: 117.7 mm
- APD: 100.3 mm
- TAD: 104.5 mm
- FL: 56.6 mm
- HC: 336.4 mm
- AC: 343.4 mm

= GA: 38 4/7 (>97%)
= GA: 38 2/7 (>97%)
= GA: 29 5/7 (10%)

Overall >97% Baby
Outcome

• Went into surgery for lung cysts
• Neonate did not survive due to hemorrhage
• No diagnosis was made
Differential Diagnosis: CCAM

- Congenital Cystic Adenomatoid Malformation
  Def: abnormality in the formation of the bronchial tree with secondary overgrowth of mesenchymal tissue from arrested bronchial development
CCAM: 3 Types

- **Type 1: Macrocystic**
  - One of more large cysts replace lung tissue
  - Single or multiple cysts measuring >2 cm

- **Type 2: Macrocystic with microcystic component**
  - Lesions consist of multiple small cysts (less than 1 cm)
  - Associated with chromosome abnormalities is 25% of cases

- **Type 3: Microcystic**
  - Large, bulky lesions appearing as echogenic masses in lung lobe
  - Hydramnios may be seen second to esophageal compression, which prevents normal fetal swallowing
Determining the type of CCAM is crucial as the prognosis varies depending on the type of lesion.

- Type 1 lesions have favorable outcomes.
- Type 2 and 3 lesions have poor prognoses.
CCAM Type I

Textbook example

Our patient
CCAM Type II

Textbook example

Our patient
CCAM Type III

Textbook example

Our patient
Works Cited

