22-year-old G1P0 with singleton fetus at 22 weeks gestation referred by obstetrician for fetal anomaly identified on ultrasound.



22-year-old G1P0 with singleton fetus at 22 weeks gestation referred by obstetrician for fetal anomaly identified on ultrasound.

#### Ultrasound











# 1<sup>st</sup> Poll



## **Prenatal Diagnosis and Recommendations**

1	2	3	4
Omphalocele with ruptured sac - need to measure TLV at 32-24 weeks & obtain amniocentesis for chromosomes	Gastroschisis with polyhydramnios - need to measure TLV	Gastroschisis without polyhydramnios & no bowel dilation	Body stalk malformation



# **Panelists Discussion**



22-year-old G1P0 with singleton fetus at 22 weeks gestation referred by obstetrician for fetal anomaly identified on ultrasound.

#### Ultrasound







 Gastroschisis with ventral abdominal defect characterized by eviscerated bowel loops lacking an overlying membrane. The umbilical cord inserts onto the fetal abdomen adjacent to the defect.
No additional fetal anomaly.

> 19-year-old G1P0 at 25 +1 weeks gestation. Anomaly first identified by ultrasound at 15 weeks.



> 19-year-old G1P0 at 25 +1 weeks gestation. Anomaly first identified by ultrasound at 15 weeks.

#### Ultrasound







> 19-year-old G1P0 at 25 +1 weeks gestation. Anomaly first identified by ultrasound at 15 weeks.

#### MRI





# 2nd Poll Vore Doll

# **Prenatal Diagnosis and Recommendations**





# **Panelists Discussion**



#### **Original Paper**

Fetal Diagnosis ‴Therapy

Fetal Diagn Ther 2011;30:60–69 DOI: <u>10.1159/000323326</u> Received: July 6, 2010 Accepted after revision: December 3, 2010 Published online: February 16, 2011

#### Characteristics and Outcome and the Omphalocele Circumference/Abdominal Circumference Ratio in Prenatally Diagnosed Fetal Omphalocele

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#### 2011

*Objective:* To evaluate the outcome of fetuses with prenatally diagnosed omphalocele and to investigate the predictive value of the omphalocele circumference/abdominal circumference (OC/AC) ratio – a measure for the relative size of the omphalocele.

*Results:* The OC/AC ratio was found predictive for herniation of the liver, respiratory insufficiency and type of surgical reconstruction.

*Conclusion:* Identification of omphalocele should arouse suspicion of genetic abnormalities, even in cases that appear isolated. The OC/AC ratio may influence counselling regarding the postnatal course.



#### SMFM Papers

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#### Fetal omphalocele ratios predict outcomes in prenatally diagnosed omphalocele

Freddy J. Montero, MD; Lynn L. Simpson, MD; Paula C. Brady, BA; Russell S. Miller, MD

2011

*Objective:* The objective of the study was to evaluate whether ratios considering omphalocele diameter relative to fetal biometric measurements perform better than giant omphalocele designation at predicting inability to achieve neonatal primary surgical closure.

*Conclusion:* The O/HC of 0.21 or greater best predicted staged or delayed omphalocele closure. Giant omphalocele designation, regardless of definition, poorly predicted outcome.







*Background:* The clinical course of patients with omphalocele is challenging to predict. There is no standard method to characterize omphalocele size. Previous studies suggest that the ratio of abdominal circumference to omphalocele defect in-utero is indicative of postnatal outcomes. We hypothesize that omphalocele ratio correlates with outcomes of primary closure versus staged closure.

*Conclusion:* The omphalocele ratio is a promising predictor of postnatal outcomes.