

MSS OB Case Presentation

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Diagnostic Medical Sonography



Patient History

29 years old

G1

16 5/7 wks based on LMP

Patient came in for a cervical length due to patients history of an arcuate shaped uterus.

16 5/7 week findings

Cervical length measured 36 mm

Abdomen circumference small

Ventral wall defect

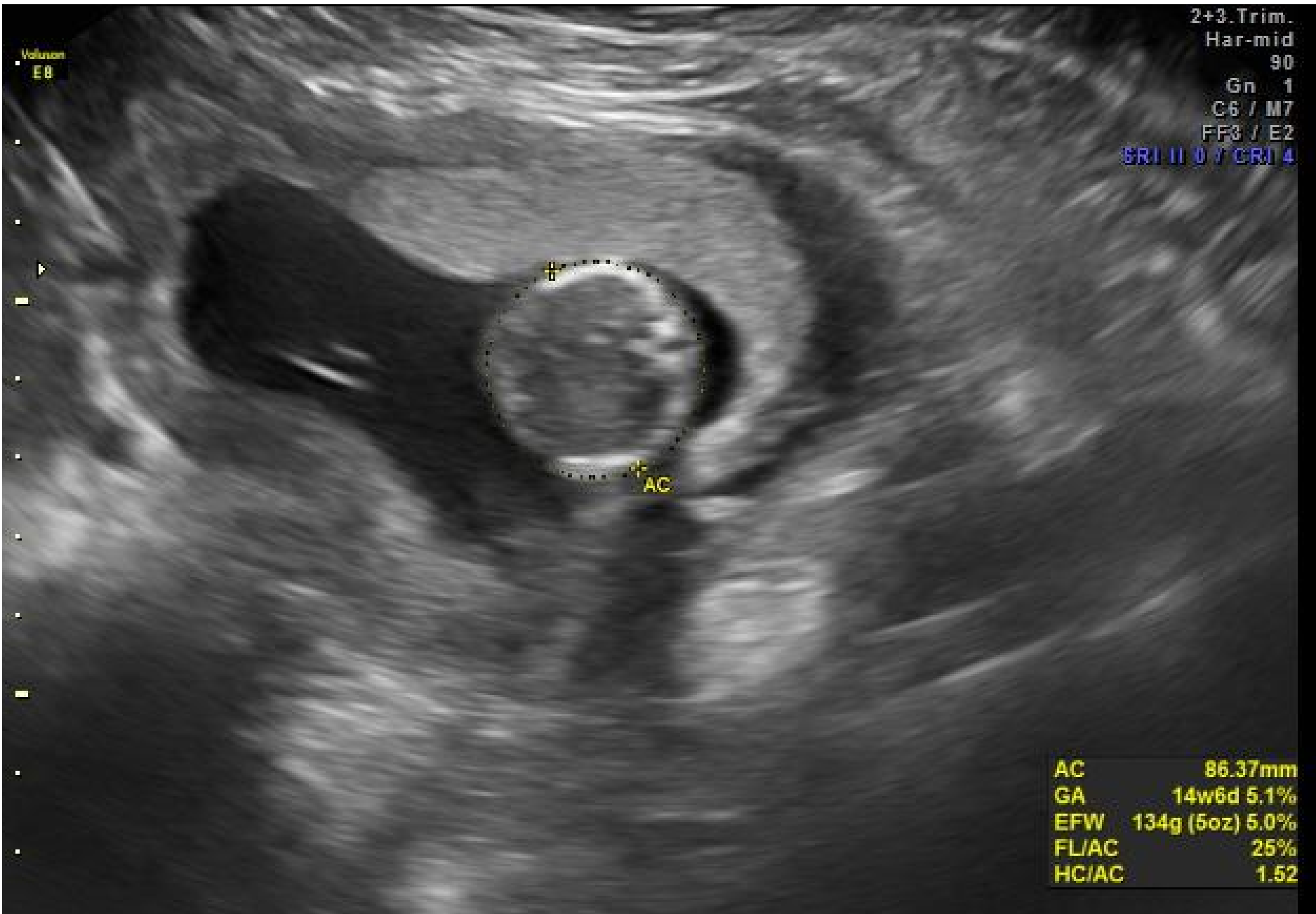
Suspected to be either an omphalocele or a gastroschisis.

Volluson
E8

100
Gn -3
C7 / M5
P3 / E2
SRI II 4

1 D 2.03cm
2 D 1.56cm





2+3.Trim.

Har-mid

90

Gn 1

C6 / M7

FF3 / E2

ERI 11 0 / CRJ 4

Volume
E0

AC

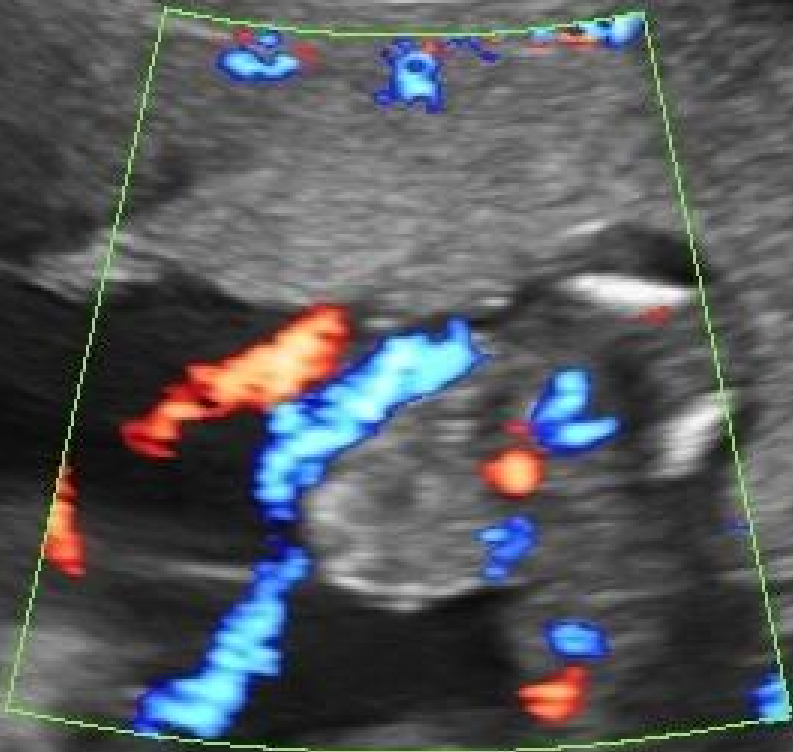
AC	86.37mm
GA	14w6d 5.1%
EFW	134g (5oz) 5.0%
FL/AC	25%
HC/AC	1.52

cm/s

Velocity
EB

2+3.Trim.
Har-mid
90
Gn 1
C6 / M7
FF3 / E2
SRI II 0 / CRI 4

94
Gn -0.0
Frq mid
Qual norm
WMF low2
PRF 1.8kHz



Omphalocele vs Gastroschisis

Herniation of abdominal contents into the base of the umbilical cord.

Liver and bowel are commonly involved.

Commonly associated with other anomalies.

US Appearance: Complex membrane enclosed sac continuous with umbilical cord.

Herniation of abdominal contents through the abdominal wall.

Usually located to the right of the umbilicus.

Typically only bowel involvement.

Not commonly associated with other anomalies.

US Appearance: Free floating bowel loops with a normal umbilical cord insertion.



18 6/7 weeks Anatomy scan

Gastroschisis confirmed

Measures 24x21 mm

Heart deviated to the right

Could not rule out diaphragmatic hernia

Stomach appears posteriorly and superiorly displaced

Gender determined to be male



Voluson
E8

2+3 Trim.
Har-low
100
Gn -1
C6 / M7
FF3 / E2
SBI II 4 / CR1 1

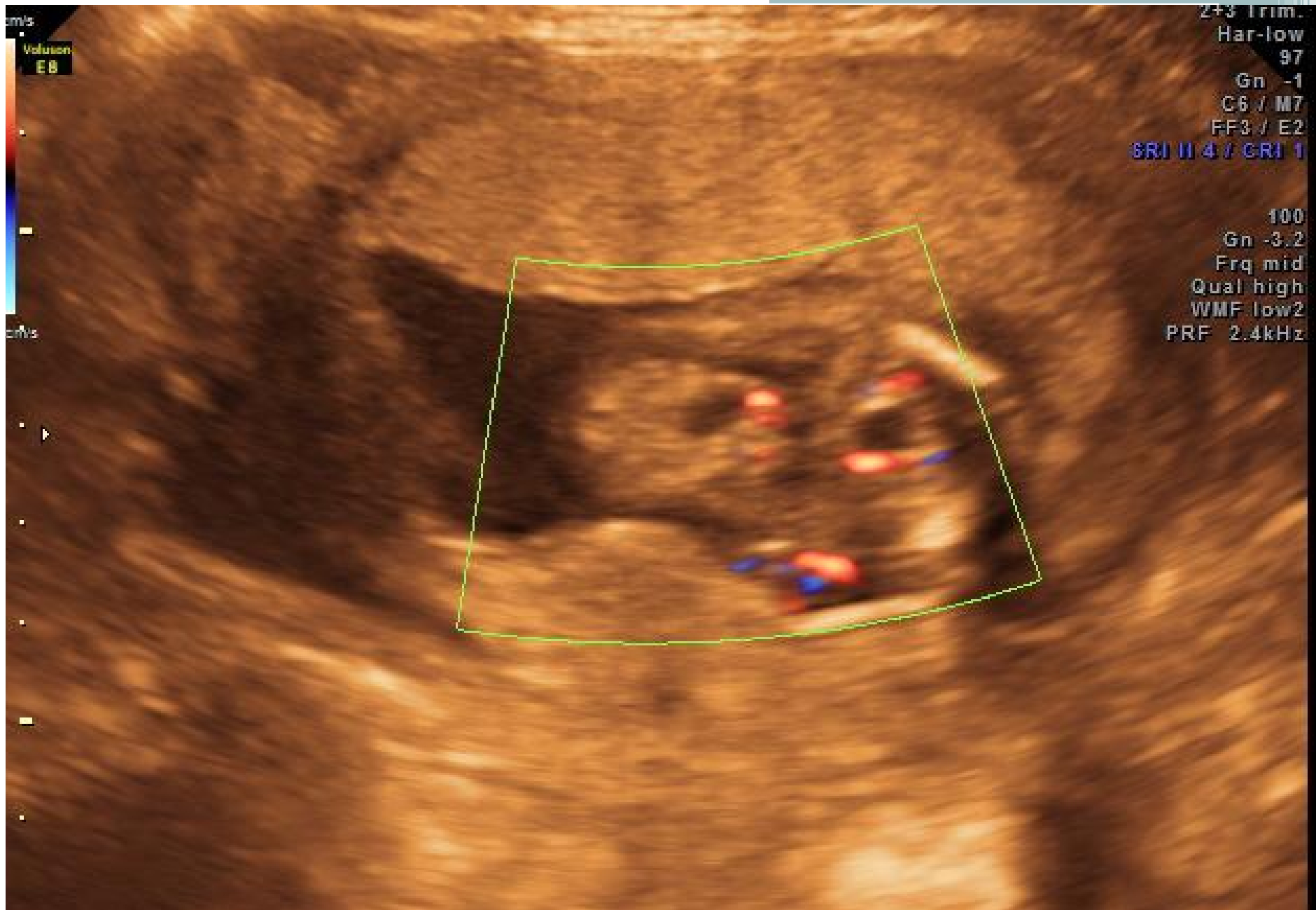
AC	112.61mm
GA	17w1d 4.7%
EFW	201g (7oz) 3.3%
FL/AC	23%
HC/AC	1.35

Volume
E0

2+3 Trim.
Har-low
100
Gn -1
C6 / M7
FF3 / E2
SRI II 4 / CRI 1



1 D 2.39cm
2 D 2.08cm



19 5/7 weeks Follow up

Gastroschisis noted again

Left sided diaphragmatic hernia with fetal stomach in the thoracic cavity noted

Mediastinal shift to the right

Suspect heart defect

Voluson
E8

2+3.Trim.
Har-mid
90
Gn 1
C6 / M7
FF3 / E2
SRI II 0 / CRI 4





Voluson
E8

Fetal Cardio
Har-mid
90
Gn -6
C7 / M7
FF4 / E1
SRI II 4 / CRI 2

Voluson
E8

2+3.Trim.
Har-mid
90
Gn -3
C6 / M7
FF3 / E2
SRI II 0 / CRI 4



Gastroschisis

1 in 3,000 pregnancies usually occurring in younger mothers.

Increased MS-AFP

Associated with small abdomen circumference

Free floating bowel thickens

Use color to determine course of cord and distinguish bowel loops from vessels.

Treatment

Regular scans are advisable to monitor the thickness of the bowel wall, bowel distention and fetal growth. Baby can go to full term if bowel remains normal in appearance.

After birth, early surgical intervention is needed to reposition bowel loops and repair the abdominal wall.

If small, one surgery is usually required.

If there is a large defect, several surgeries are required to slowly move the contents back into the abdomen.

At birth, the intestines protrude through a hole near the umbilical cord.



SOURCE: State Journal research

JASON KLEIN - State Journal

Prognosis

The survival rate is above 90%.

May develop a bowel obstruction secondary to a kink or scar in bowel.

Most gastroschisis babies live a normal life.

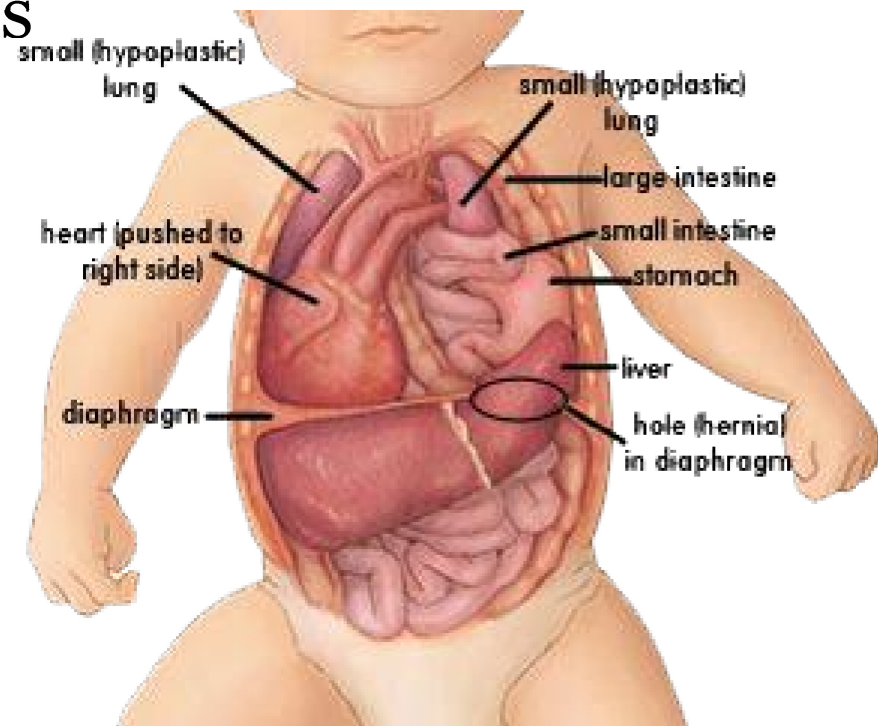
Diaphragmatic Hernia

1 in every 2,500 live births

Majority occur on the left side

2x more common in males

Not genetically linked



Prognosis



Depends on the severity of respiratory distress
Worsens if diagnosis is made prior to 24 weeks
Inhibits lung formation

Outcome

Patient terminated pregnancy due to:

Gastroschisis

Left sided diaphragmatic hernia

Suspected heart defect

Thanks for your attention!

