

Case Studies



for the
Obstetrical Sonographer

Rebecca Willis, RDMS

CASE # 1

REASON FOR VISIT:

Abnormal marker screen

EXAM OBSERVATIONS/NOTES:

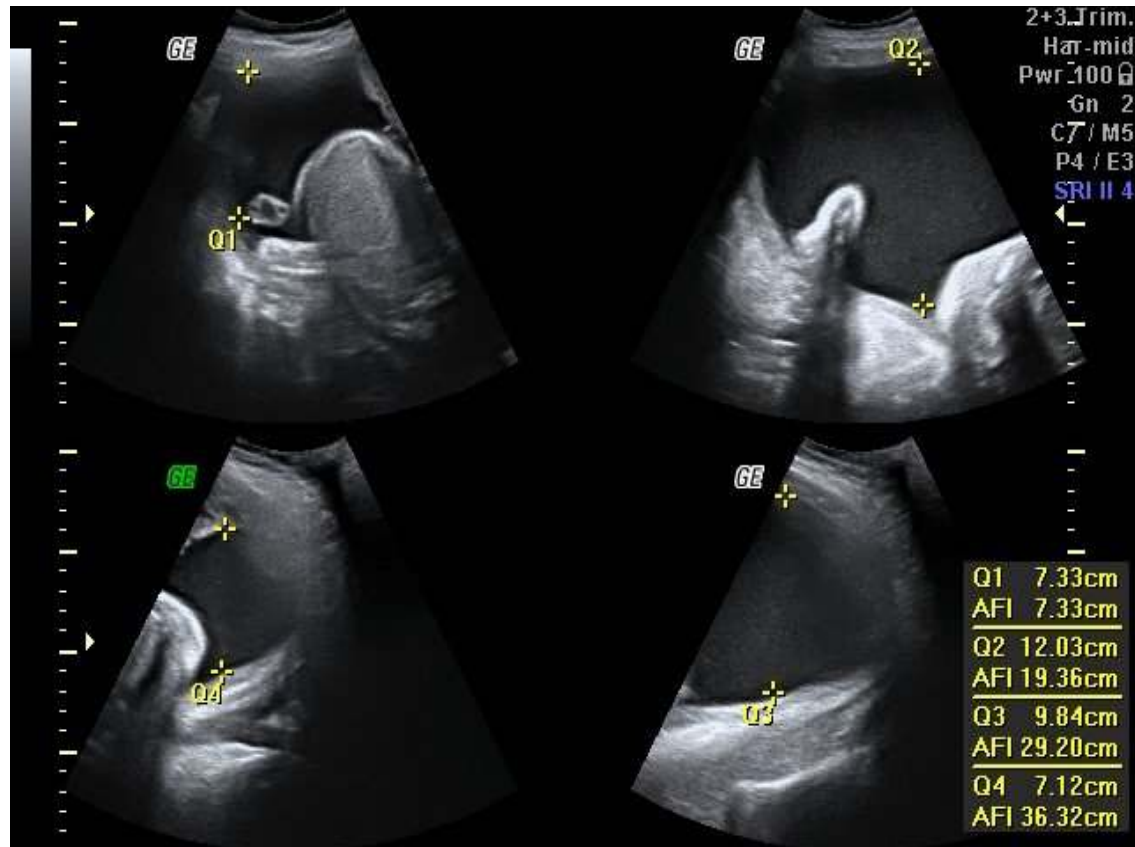
- . Ambiguous genitalia
- . Polyhydramnios 36.32 cm (normal between 10 - 20 cm)
- . Ventriculomegaly 11.66 mm (normal <10 mm)
- . Pericardial effusion
- . Amniocentesis: “additional chromosome material on short arm of one chromosome 9. Male karyotype.”
- . Hospital report at birth: external genitalia appeared female



Ambiguous Genitalia

Ambiguous Genitalia (3-D)





Polyhydramnios

Ventriculomegaly





Pericardial Effusion

CASE # 2

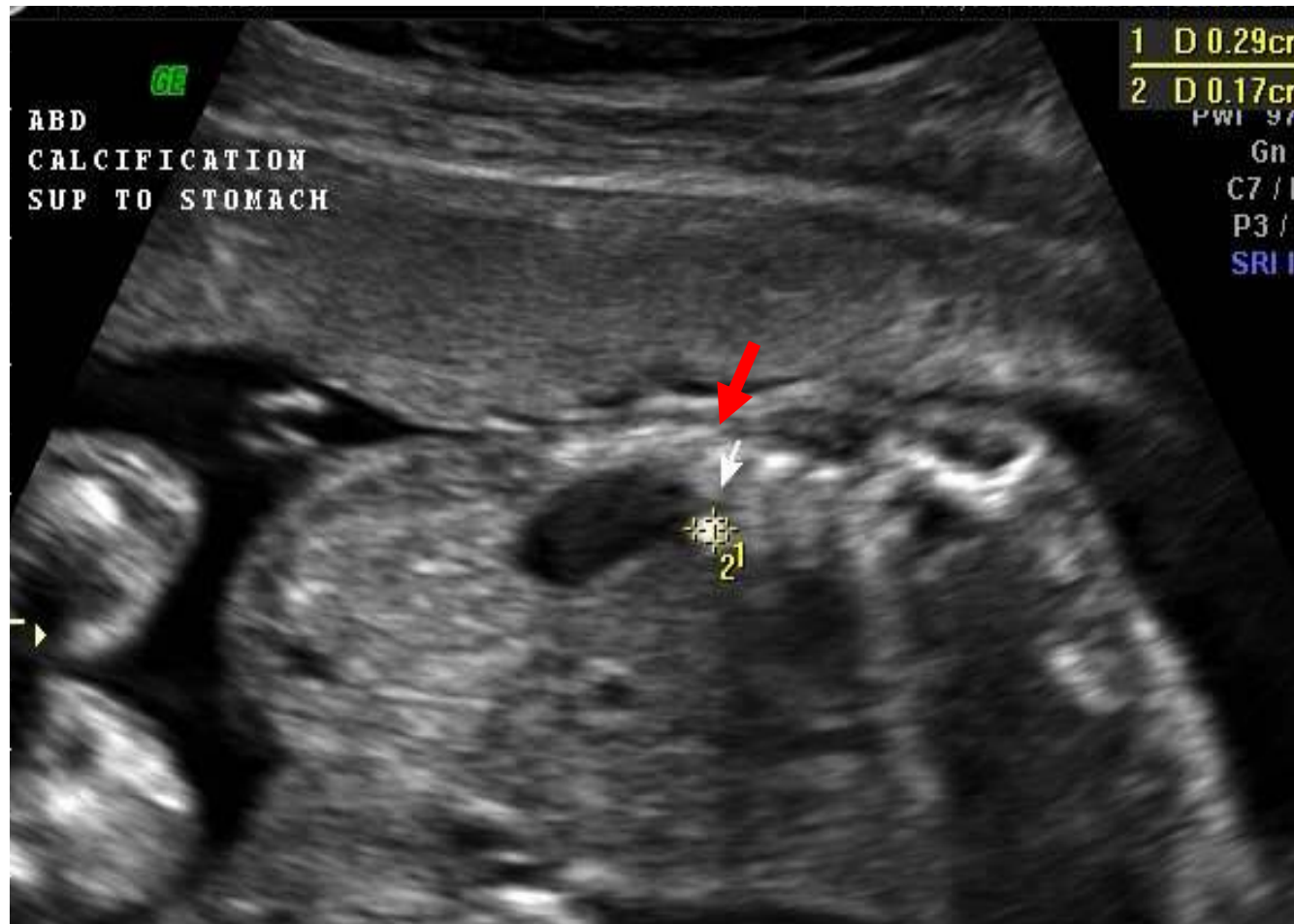
REASON FOR VISIT:

Calcification noted superior to stomach

EXAM OBSERVATIONS/NOTES:

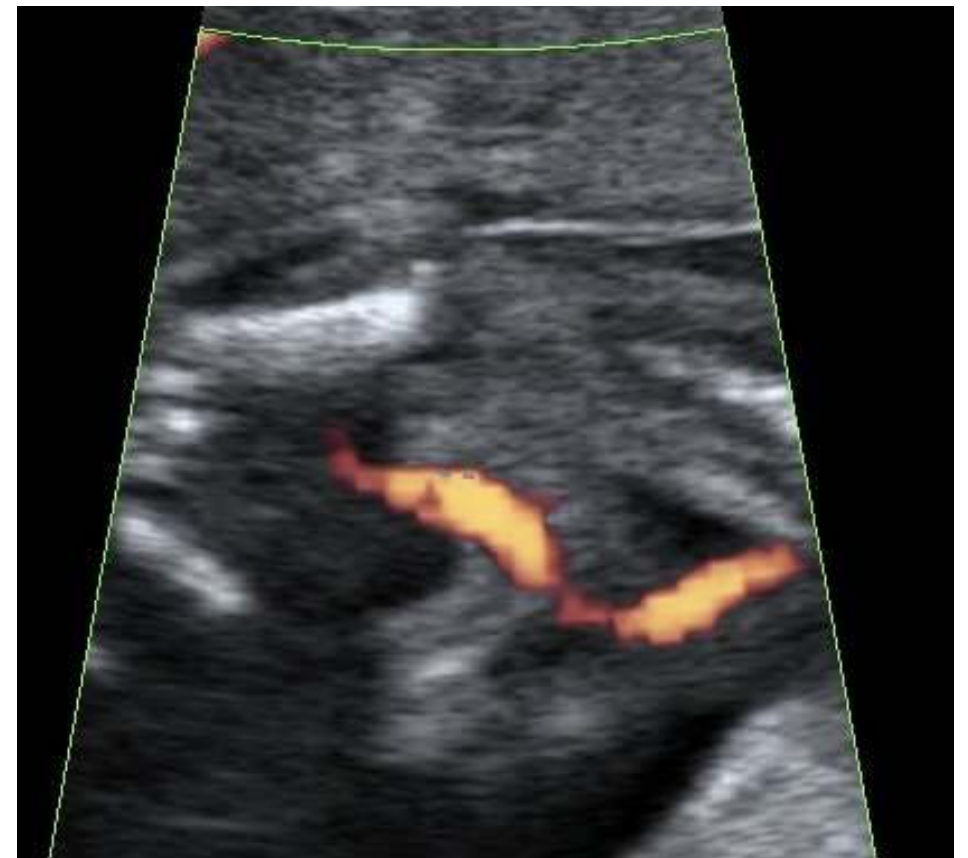
- . 2 vessel cord
- . Ventricular-septal defect (VSD)
- . Horseshoe kidneys
- . Amniocentesis: FISH (fluorescent in situ hybridization) result returned normal*; full test results abnormal: “abnormal additional material on one chromosome 4.”
- . Referral to pediatric cardiologist

*FISH provides detection only for trisomies 13, 18 and 21.



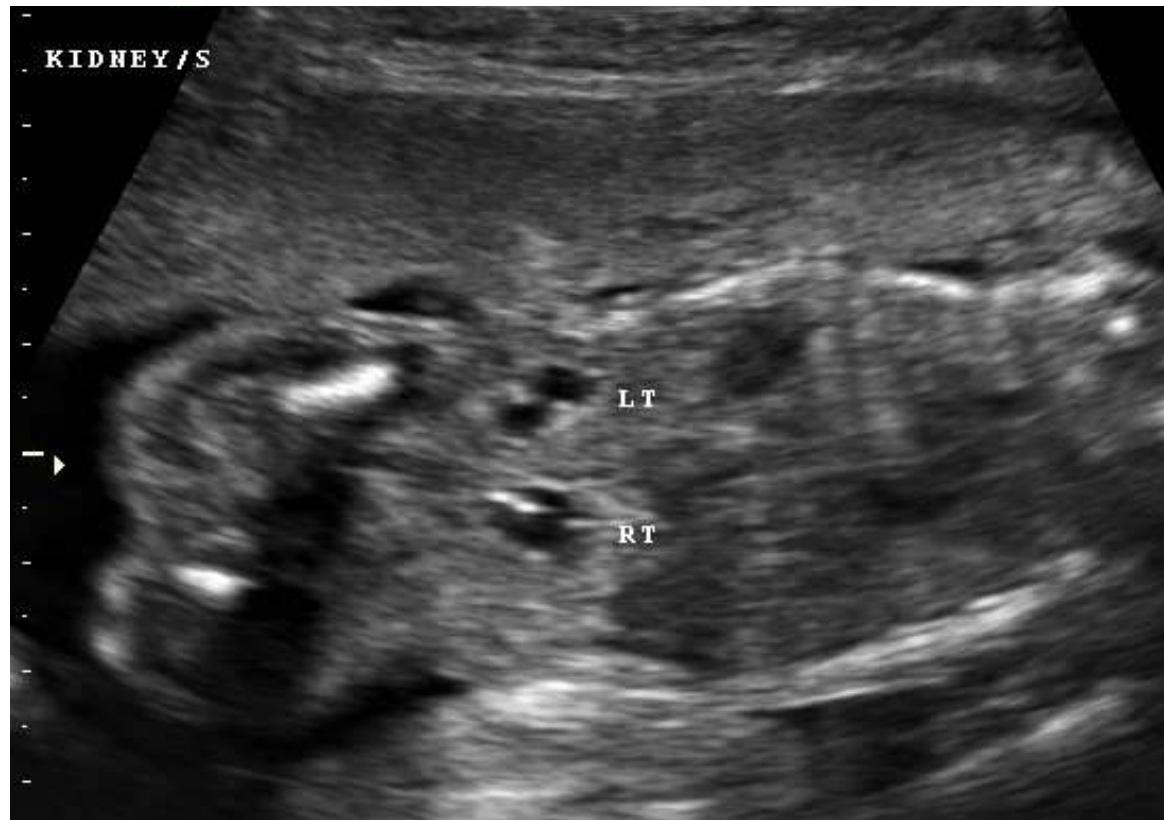
Calcification

2 Vessel Cord





VSD



Horseshoe Kidneys

Horseshoe Kidneys w/Doppler





Horseshoe Kidneys



CASE # 3

REASON FOR VISIT:

Abnormal marker screen

EXAM OBSERVATIONS/NOTES:

- . 13w3d: Increased nuchal translucency 6.4 mm (normal <3 mm)
- . 20w3d: Nuchal fold 6.07 mm (normal <6 mm)
- . 34w - 35w: Overdistended bladder, hydronephrosis
- . Amnio results: positive for T21, male



Nuchal Translucency (NT)

Nuchal Translucency (NT)





Nuchal Fold (NF)

No nasal bone seen



Overdistended bladder



Hydronephrosis



CASE # 4

REASON FOR VISIT:

Twin gestation/AMA

EXAM OBSERVATIONS/NOTES:

- . 16w5d: normal twin gestation
- . 18w: Amnios were normal
- . 27w3d: Cervical shortening/funneling 1.04 cm (normal over 2.5 cm); fetal demise of Twin A
- . Gave birth at 28w3d
- . Baby B is healthy



Cervical shortening/funneling



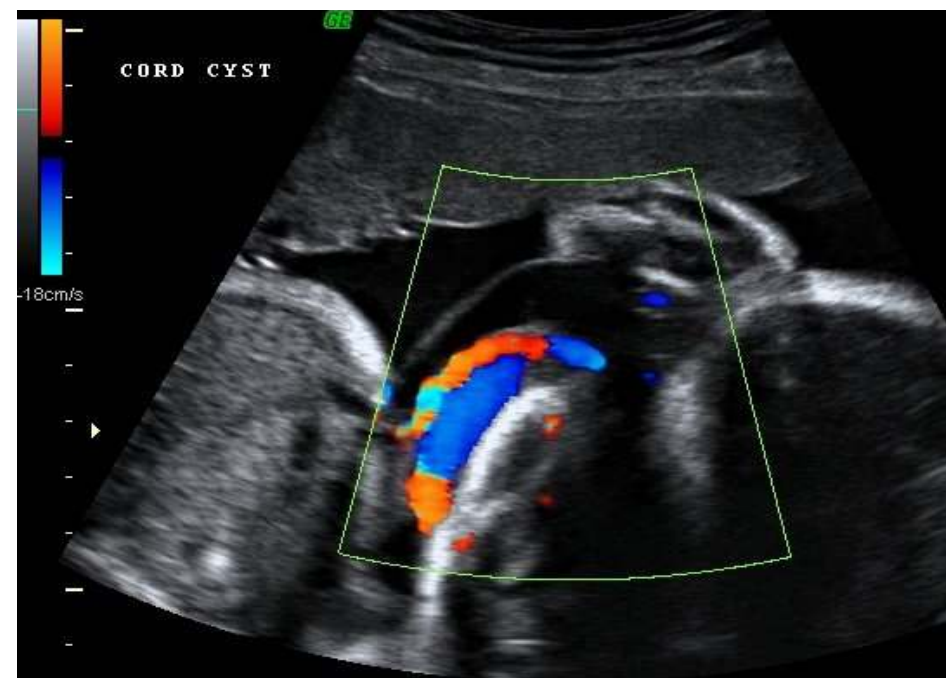
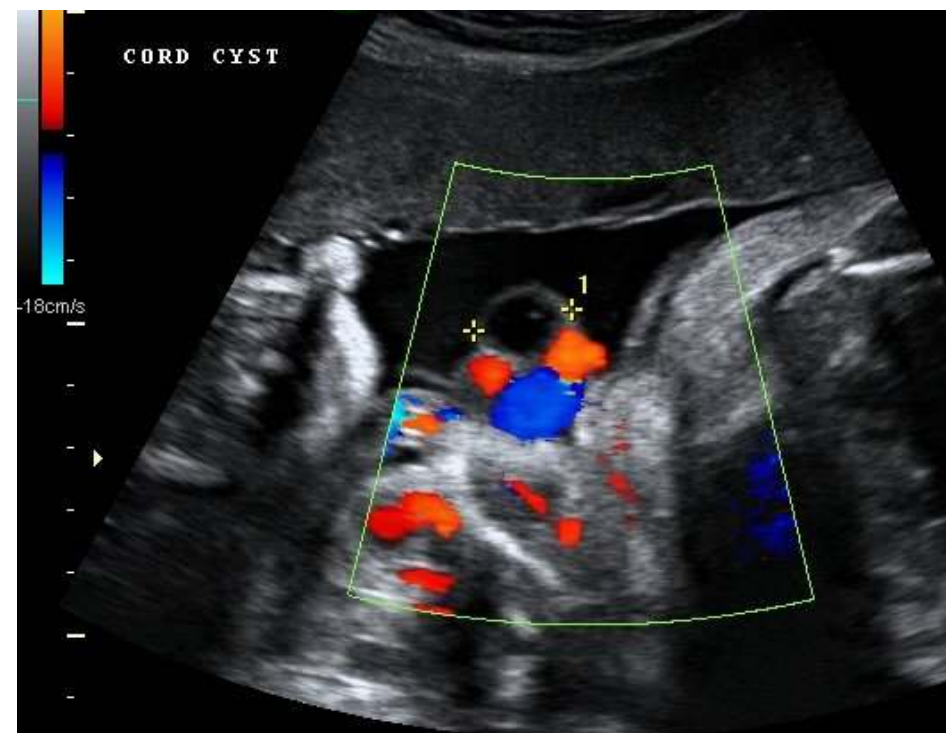
CASE # 5

REASON FOR VISIT:

Varicella exposure (chicken pox)

EXAM OBSERVATIONS/NOTES:

- . Umbilical Cord Cyst
- . Otherwise normal



CASE # 6

REASON FOR VISIT:

Increased Nuchal Translucency

EXAM OBSERVATIONS/NOTES:

- . CRL 12w5d
- . NT measured 8.3 mm
- . Declined Amniocentesis
- . Did not return for follow-up visit



Nuchal Translucency (NT)



CASE # 7

REASON FOR VISIT:

Hydrocephalus

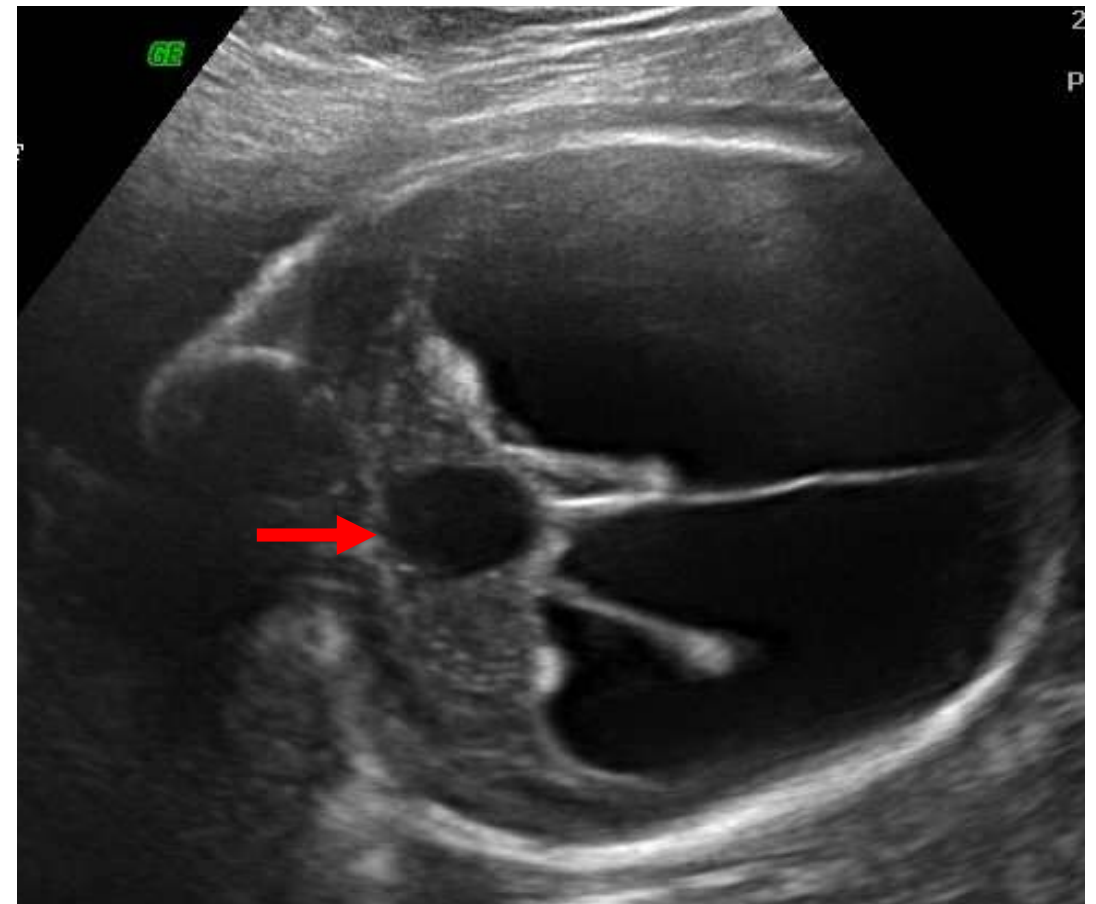
EXAM OBSERVATIONS/NOTES:

- . Severe hydrocephalus
- . Splaying of cerebellum (Dandy Walker malformation)
- . Had c-section with neonatal demise



Hydrocephalus

Dandy Walker malformation



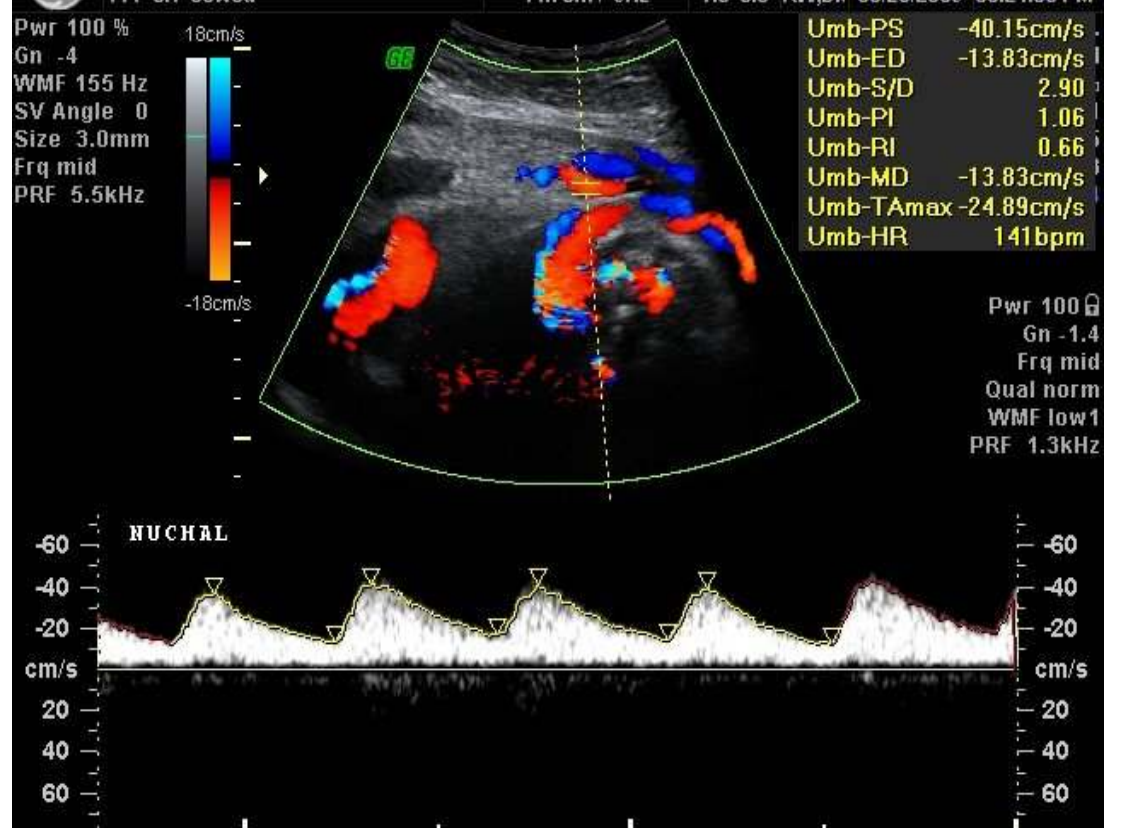
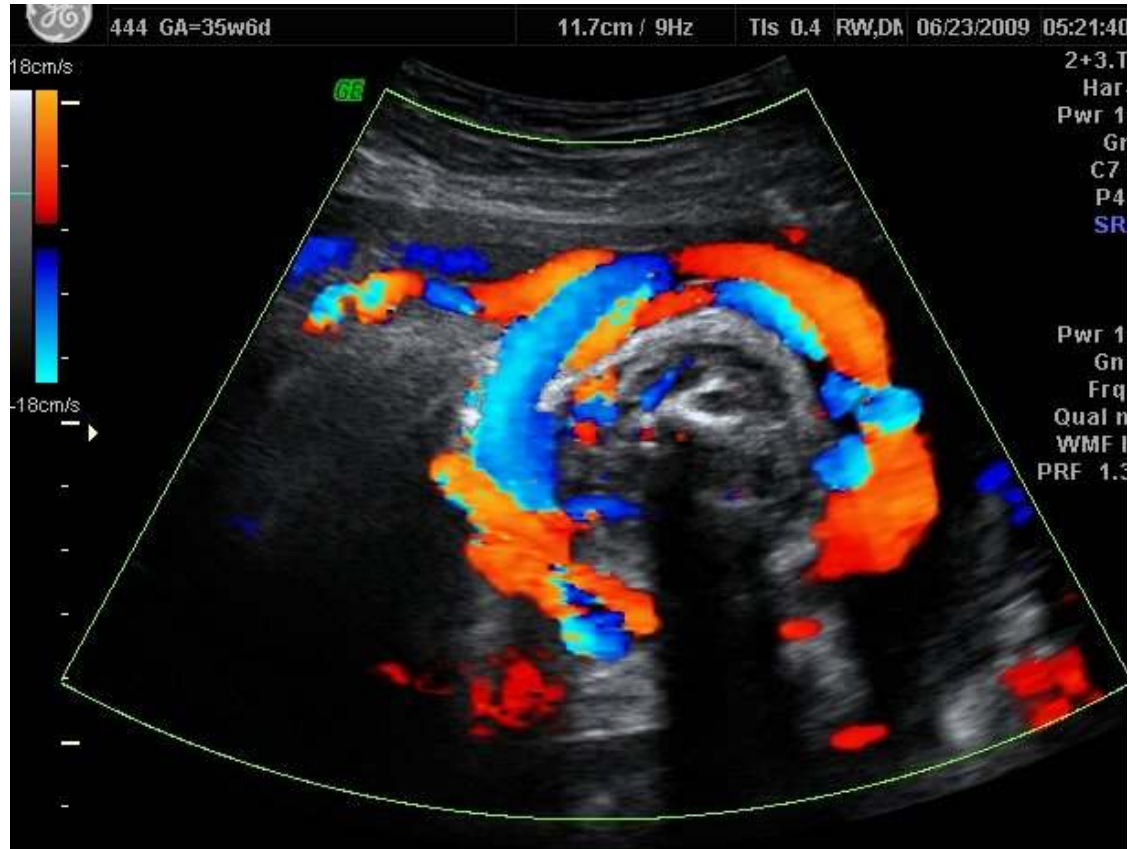
CASE # 8

REASON FOR VISIT:

AMA

EXAM OBSERVATIONS/NOTES:

- . Normal exams until 35w6d, nuchal cord noted



CASE # 9

REASON FOR VISIT:

AMA

EXAM OBSERVATIONS/NOTES:

- . Partial molar pregnancy with fetal demise
- . Fetal skull and long bones identified
- . Referred to Winnie Palmer Hospital for D & C



CASE # 10

REASON FOR VISIT:

Twin gestation

EXAM OBSERVATIONS/NOTES:

- . Twin B: choroid plexus cyst
- . Amniocentesis: normal



CASE # 11

REASON FOR VISIT:

Gastroschisis

EXAM OBSERVATIONS/NOTES:

- . Amnio results normal
- . 34w4d: Intestinal stenosis noted
- . 36w0d: Stomach seen in the fetal pelvis; discordant size of kidneys









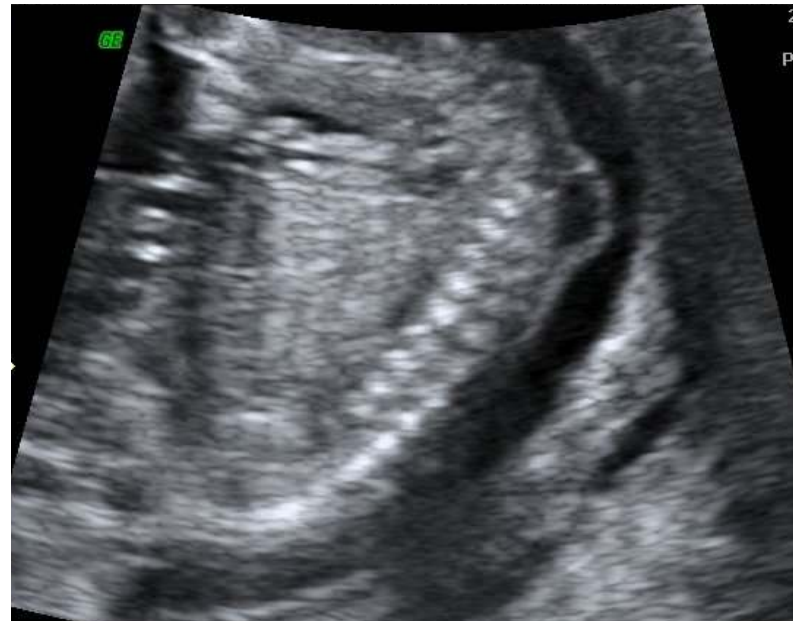
CASE # 12

REASON FOR VISIT:

Abnormal tetra: positive for DS-1:29, T18-1:10

EXAM OBSERVATIONS/NOTES:

- . Spina bifida noted in sacral area
- . Amnio was normal, no acetylcholinesterase found in amniotic fluid, which indicates defect is closed.



CASE # 13

REASON FOR VISIT:

Twin gestation, monochorionic

EXAM OBSERVATIONS/NOTES:

- . Twins appeared normal until 22w
- . 22w3d: severe oligohydramnios seen on twin B; TTTS (twin-to-twin transfusion syndrome) suspected
- . Referred to University of Miami for laser photocoagulation of communicating vessels
- . Procedure performed at 24 weeks on seven communicating vessels
- . Fetal demise of Twin A noted during follow-up visit at 25w5d.
- . Spalding sign noted on fetal skull of Twin A at 27w4d.



CASE # 14

REASON FOR VISIT:

Suspected omphalocele

EXAM OBSERVATIONS/NOTES:

- . Omphalocele confirmed
- . Amnio done at 18 weeks; FISH results were normal, complete results not available at time of this report.







CASE # 15

REASON FOR VISIT:

9 miscarriages

EXAM OBSERVATIONS/NOTES:

- . Club foot
- . Amniocentesis: normal



CASE # 16

REASON FOR VISIT:

Pyelectasis

EXAM OBSERVATIONS/NOTES:

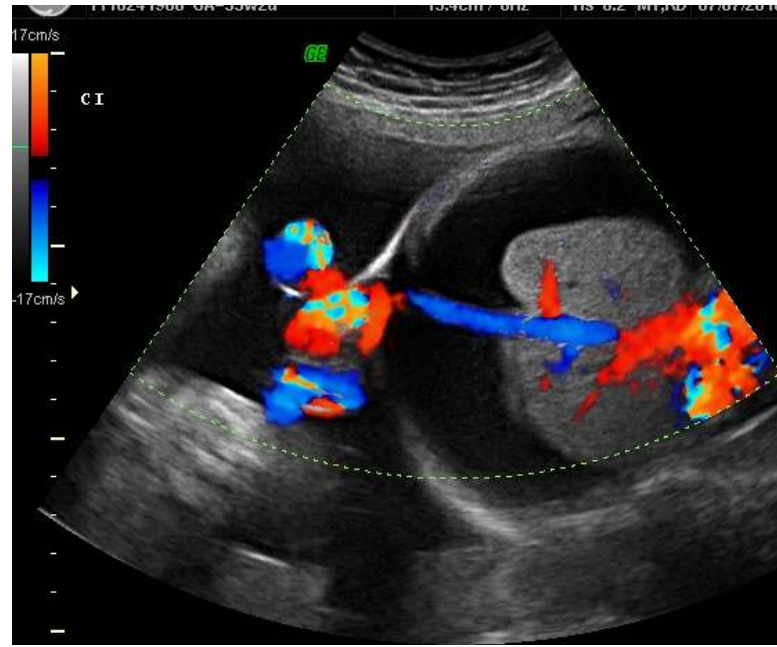
- . Bilateral pyelectasis and hydronephrosis, ureterovesical junction obstruction (UVJ)
- . 2 vessel cord





MISCELLANEOUS ABNORMALITIES

Transverse ascites



Sagittal ascites



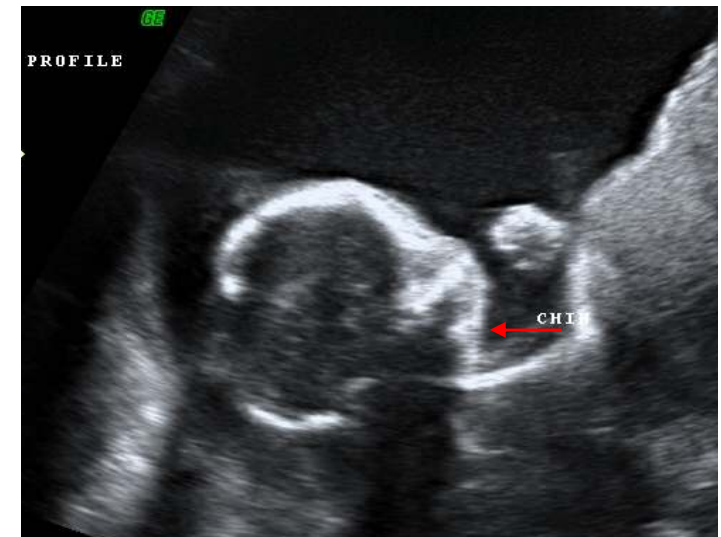
**Duodenal atresia
(double-bubble sign)**



Acrania



Micrognathia



Spina Bifida



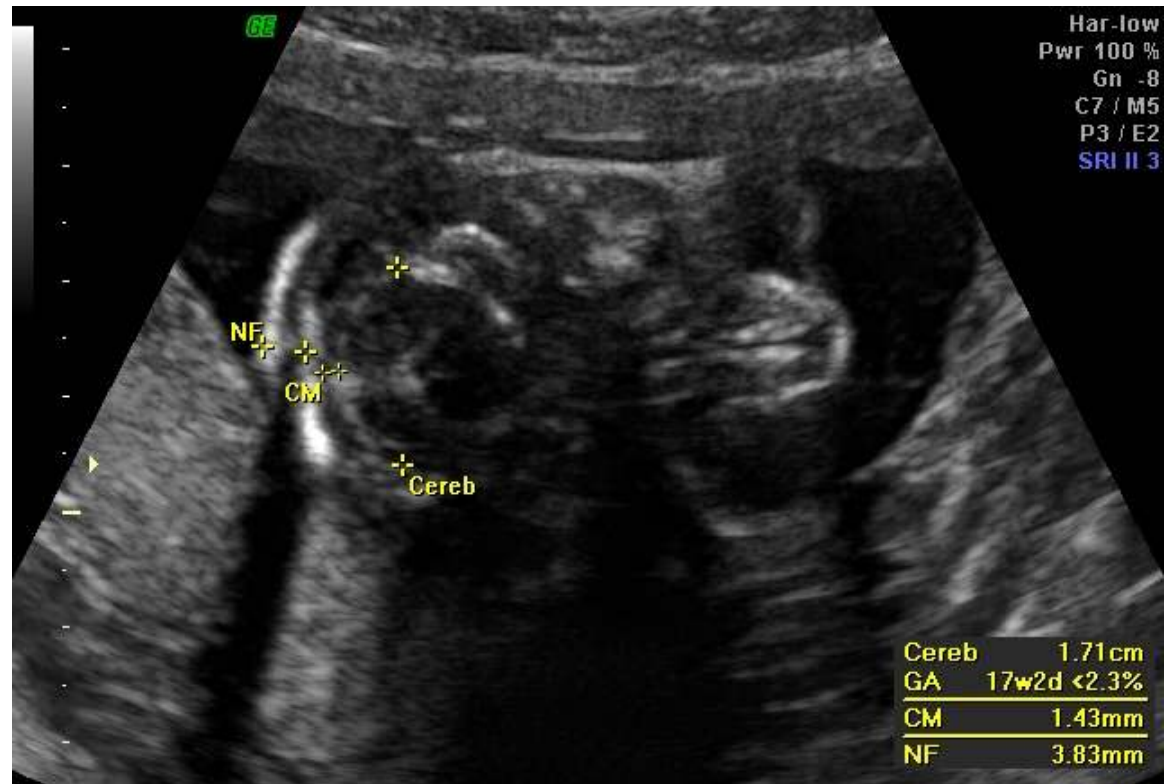
Bilateral cleft lip



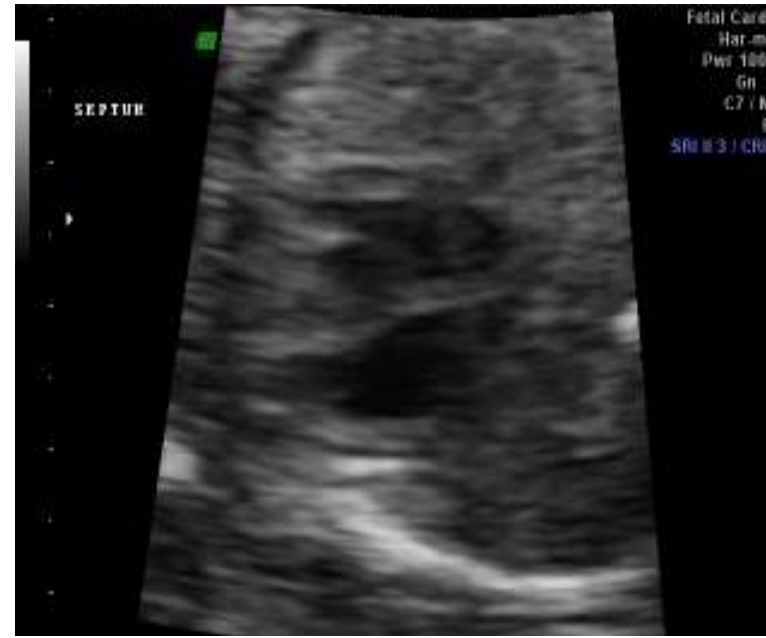
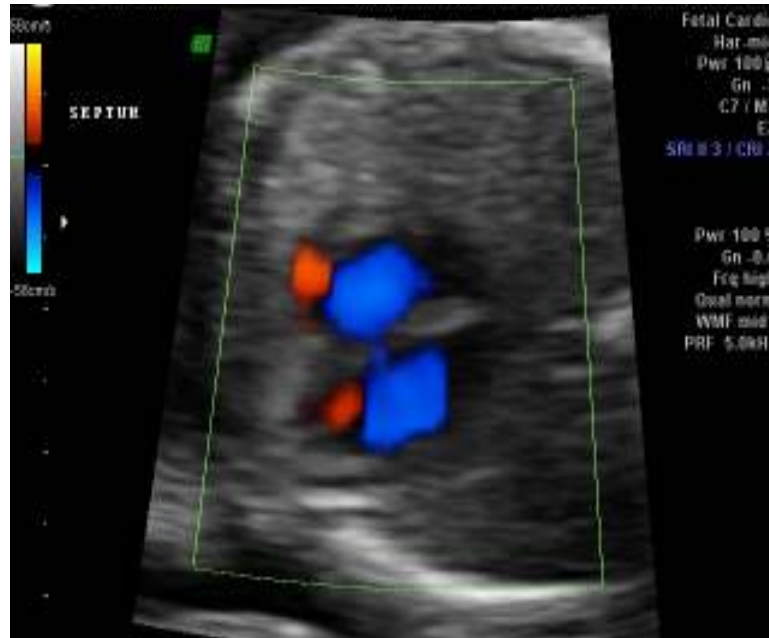
Cleft palate



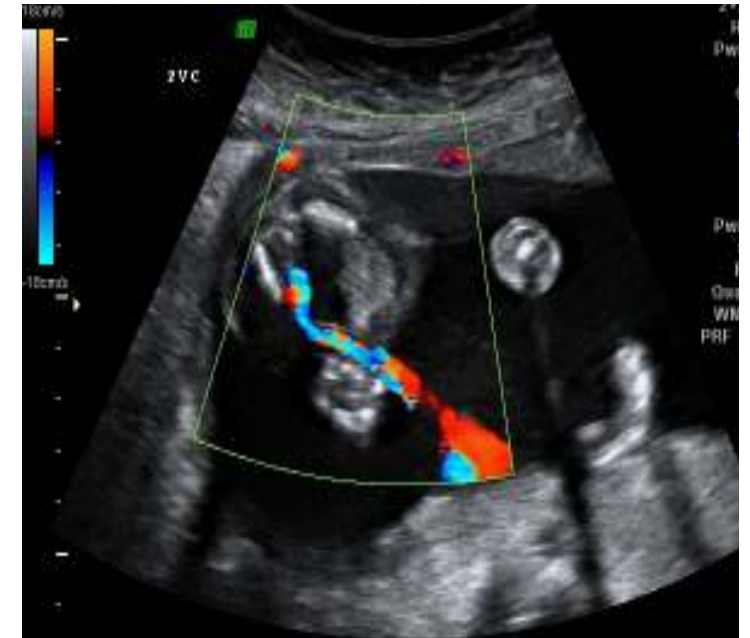
Spina bifida causing “banana” and “lemon” signs.



Ventricular Septal Defect (VSD)



Two Vessel Cord



Multicystic Dysplastic Kidneys

