

The Screening Anatomic Survey

M. Margaret Harry, MHS RDMS RDCS
Perinatal Sonographer II
Children's Mercy Hospital
Elizabeth J Ferrell Fetal Health Center

LOVE WILL.



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- No disclosures



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Elizabeth J Ferrell Fetal Health Center

- Established in 2009
- First delivery: March 2011
- Total deliveries (as of 12/4/2020): 1421



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Dating Criteria

Table 1. Guidelines for Redating Based on Ultrasonography ⇄

Gestational Age Range*	Method of Measurement	Discrepancy Between Ultrasound Dating and LMP Dating That Supports Redating
≤13 6/7 wk	CRL	
• ≤ 8 6/7 wk		More than 5 d
• 9 0/7 wk to 13 6/7 wk		More than 7 d
14 0/7 wk to 15 6/7 wk	BPD, HC, AC, FL	More than 7 d
16 0/7 wk to 21 6/7 wk	BPD, HC, AC, FL	More than 10 d
22 0/7 wk to 27 6/7 wk	BPD, HC, AC, FL	More than 14 d
28 0/7 wk and beyond [†]	BPD, HC, AC, FL	More than 21 d

Abbreviations: AC, abdominal circumference; BPD, biparietal diameter; CRL, crown–rump length; FL, femur length; HC, head circumference; LMP, last menstrual period.

*Based on LMP.

[†]Because of the risk of redating a small fetus that may be growth restricted, management decisions based on third-trimester ultrasonography alone are especially problematic and need to be guided by careful consideration of the entire clinical picture and close surveillance.

Methods for Estimating the Due Date. Committee Opinion No. 700. (2017). *American College of Obstetrics & Gynecology*, 129(5), 150–4.
doi:10.1097/aog.0000000000002046



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Indications for Standard Examination

- Assess fetal anatomy and biometry
- Screen for anomalies
- Estimate gestational age
- Evaluation of cervical length
- Evaluate fetal growth
- Evaluation of uterine size/date discrepancy
- Determine fetal presentation
- Evaluation of vaginal bleeding
- Suspected fetal death



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Indications for Detailed Examination

- Previous child or fetus with congenital, genetic, or chromosomal abnormality
- Known or suspected fetal anomaly
- Known or suspected fetal growth restriction
- Fetus at increased risk for congenital, genetic, or chromosomal abnormality
- Congenital infections
- Maternal drug use
- Alloimmunization
- Abnormal amniotic fluid assessment
- Suspected placental abnormality



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Imaging Parameters

- Fetal presentation
- Fetal cardiac activity
- Fetal number
 - For multiple gestations: document chorionicity/amnionicity, comparison of fetal sizes, evaluate amniotic fluid volume, and external genitalia (if possible)
- Fetal anatomy
- Amniotic fluid assessment/volume
- Placental location, appearance, relationship to internal cervical os
- Evaluation of cervical length
- Maternal anatomy



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76805 versus 76811

Table Continued

Component	Standard	Detailed*
Maternal anatomy	Cervix (transvaginal when indicated) Uterus	
Biometry	Adnexa Biparietal diameter Head circumference Femur length Abdominal circumference Fetal weight estimate	Cerebellum ³⁴ Inner and outer orbital diameters ⁷⁵ Nuchal fold thickness (16–20 wk) ^{37,39} Humerus ^{77,39} Ulna/radius Tibia/fibula

*As noted in the text of this Practice Parameter, all of these elements may not be indicated in every detailed obstetric ultrasound examination. Likewise, obtaining additional elements not listed in the table may be warranted.

Table Components of CPT Code 76811 (Standard and Detailed Examinations)

Component	Standard	Detailed*
Head and neck	Lateral cerebral ventricles Choroid plexus Midline falx Cavum septi pellucidi Cerebellum Cisterna magna	3rd ventricle ²⁷ 4th ventricle ²⁷ Lateral ventricular wall integrity, contour, ependymal lining ²⁷ Cerebellar lobes, vermis, and cisterna magna ²⁸ Corpus callosum ²⁹ Integrity and shape of cranial vault ²⁰ Brain parenchyma ³¹ Neck ^{32,33} Profile ^{34,35} Nasal bone (15–22 wk) ^{37,40} Coronal face (nose/lips/lens) ³⁴ Palate, maxilla, mandible, and tongue ^{41,42} Ear position and size Orbits Situs
Face	Upper lip	Aortic arch Superior and inferior venae cavae ⁴³ Ductal arch Interventricular septum 3-vessel view ⁴⁴ 3-vessel and trachea view ⁴⁴ Lungs ^{45,46} Integrity of diaphragm ⁴⁷ Ribs ^{48,49} Small and large bowel ^{50,52} Adrenal glands ⁵³ Gallbladder ^{54,55} Liver ⁵⁶ Renal arteries ⁵⁷ Spleen Integrity of abdominal wall ⁵⁸ Integrity of spine and overlying soft tissue ^{59,60} Shape, curvature, conus medullaris ^{61,62}
Chest	Cardiac activity	Number, architecture, and position ^{63–65} Digits of hands and feet: number and position ^{66–68} External genitalia ⁶⁹ Mammas ^{70,71} Accessory/succenturiate lobe with location of connecting vascular supply to primary placenta and internal cervical os ^{72,73} Implantation site with evaluation for abnormal adherence ⁷⁴
Heart	4-chamber view Left ventricular outflow tract Right ventricular outflow tract 3-vessel view (if technically feasible) ⁴⁴ 3-vessel and trachea view (if technically feasible) ⁴⁴	Stomach (presence, size, and situs) Kidneys Urinary bladder Cord insertion site into fetal abdomen Umbilical cord vessel number
Thorax		Cervical Thoracic Lumbar Sacral spine
Abdomen	Stomach (presence, size, and situs) Kidneys Urinary bladder Cord insertion site into fetal abdomen Umbilical cord vessel number	Legs Arms Hands Feet
Spine	Cervical Thoracic Lumbar Sacral spine	Genitalia In multiple gestations When medically indicated Location
Extremities	Legs Arms Hands Feet	Placenta Relationship to internal os Appearance Placental cord insertion
Genitalia	In multiple gestations When medically indicated Location	Fetal number Presentation Qualitative or semiquantitative estimate of amniotic fluid
Placenta	Relationship to internal os Appearance Placental cord insertion	
Standard evaluation	Fetal number Presentation Qualitative or semiquantitative estimate of amniotic fluid	

AIUM Practice Parameter for the Performance of Detailed Second- and Third-Trimester Diagnostic Obstetric Ultrasound Examinations. (2019). *Journal of Ultrasound in Medicine*. 38(12), 3093-3100. doi:10.1002/jum.15163



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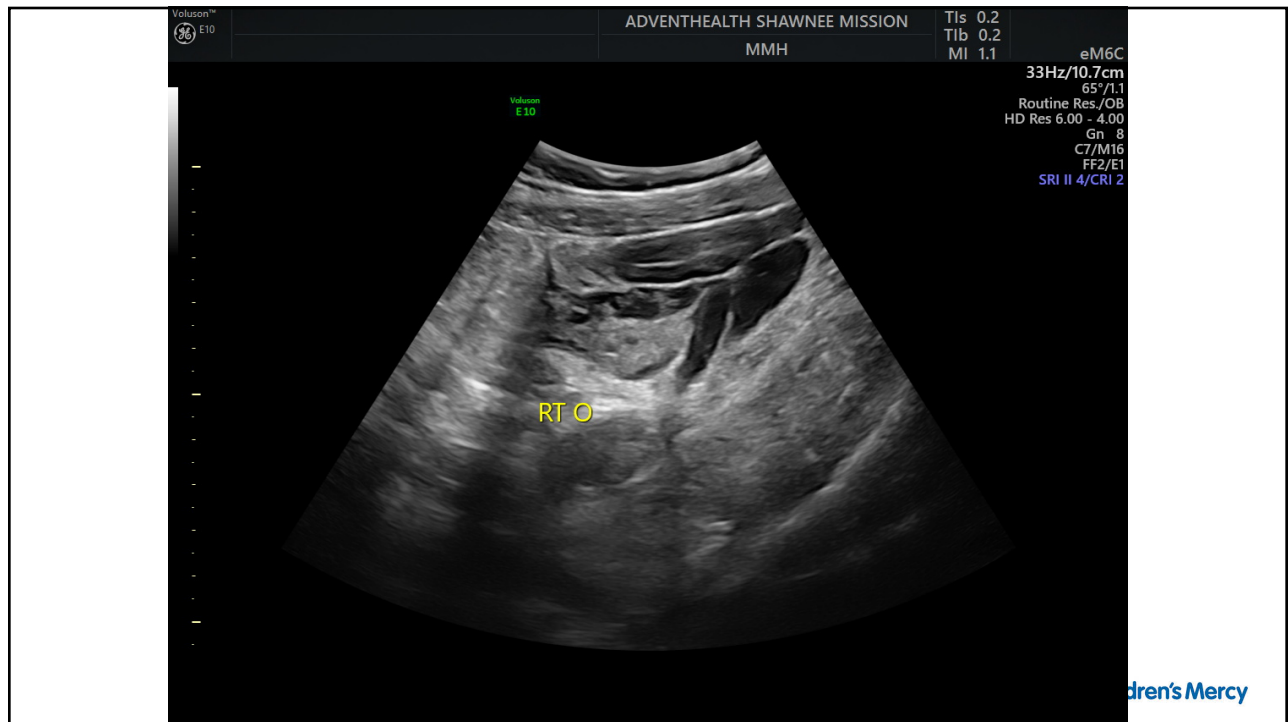
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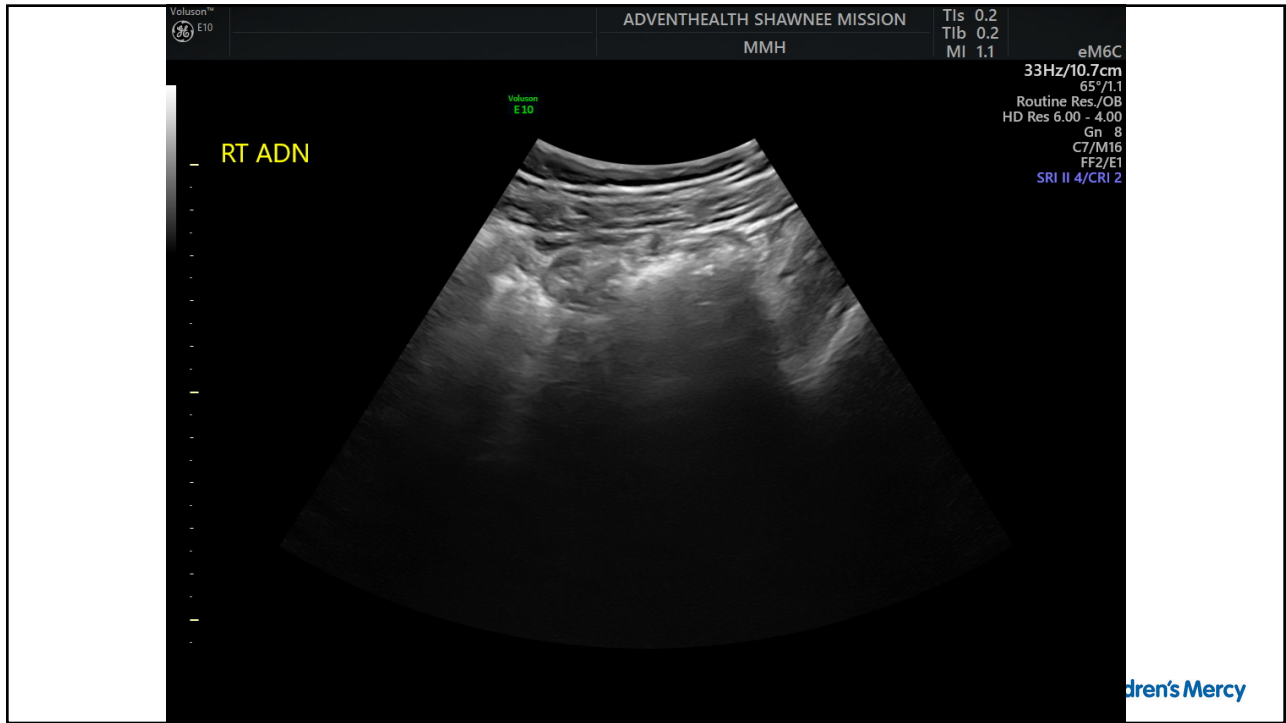
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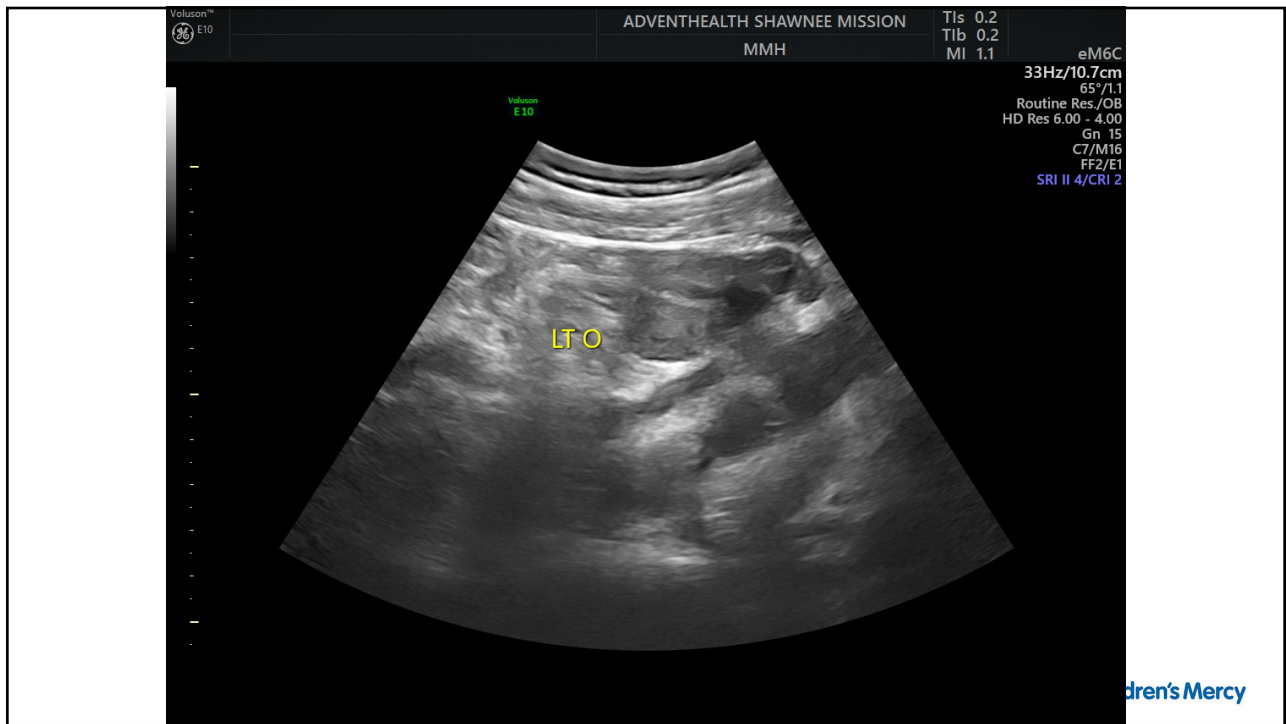
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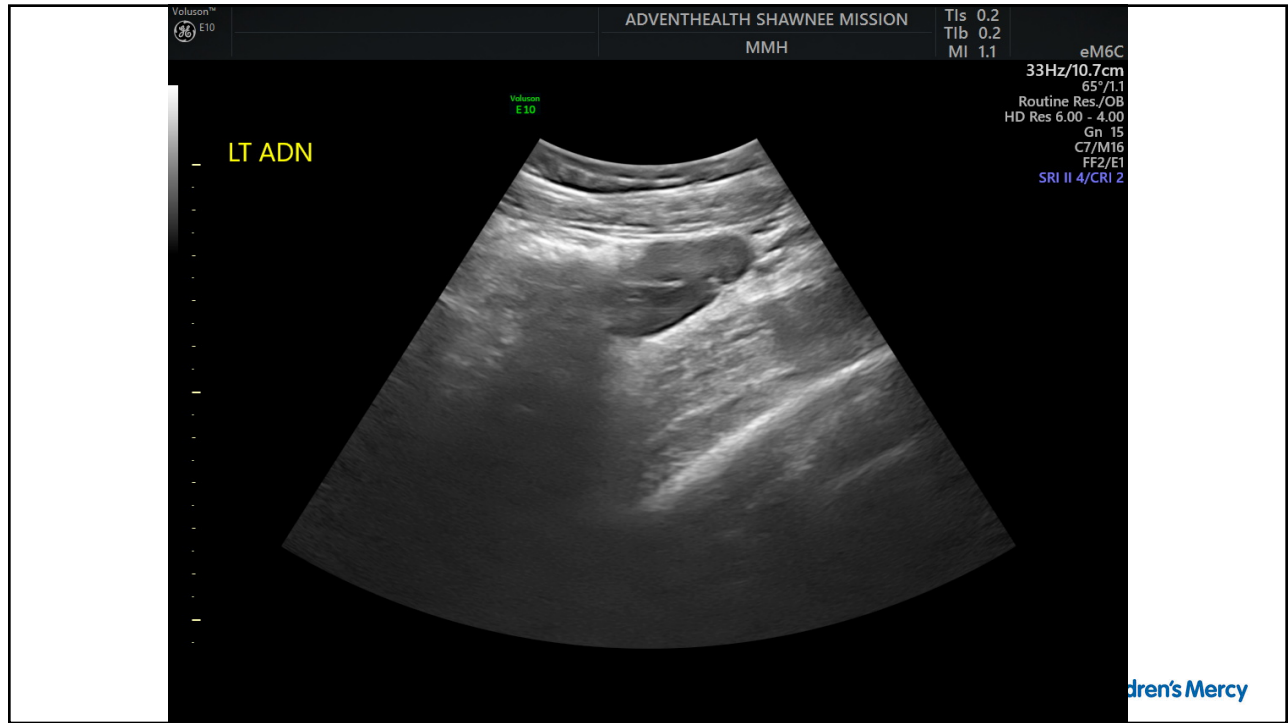
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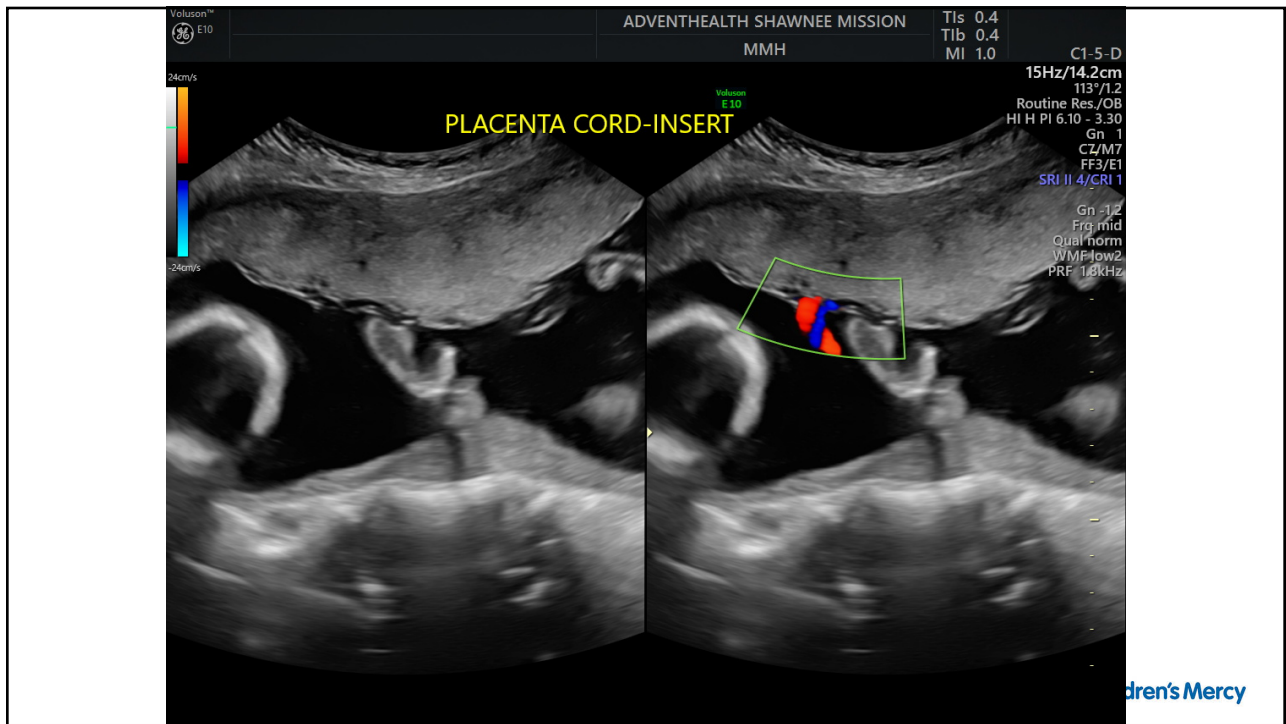
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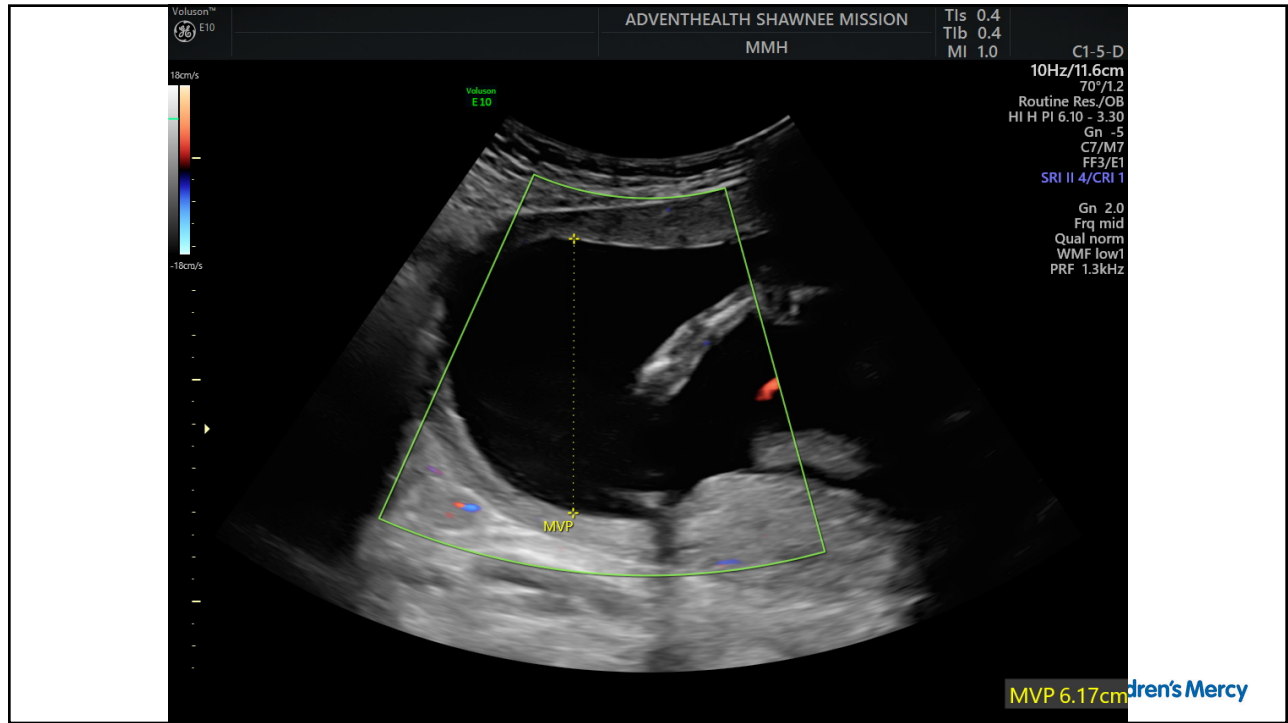
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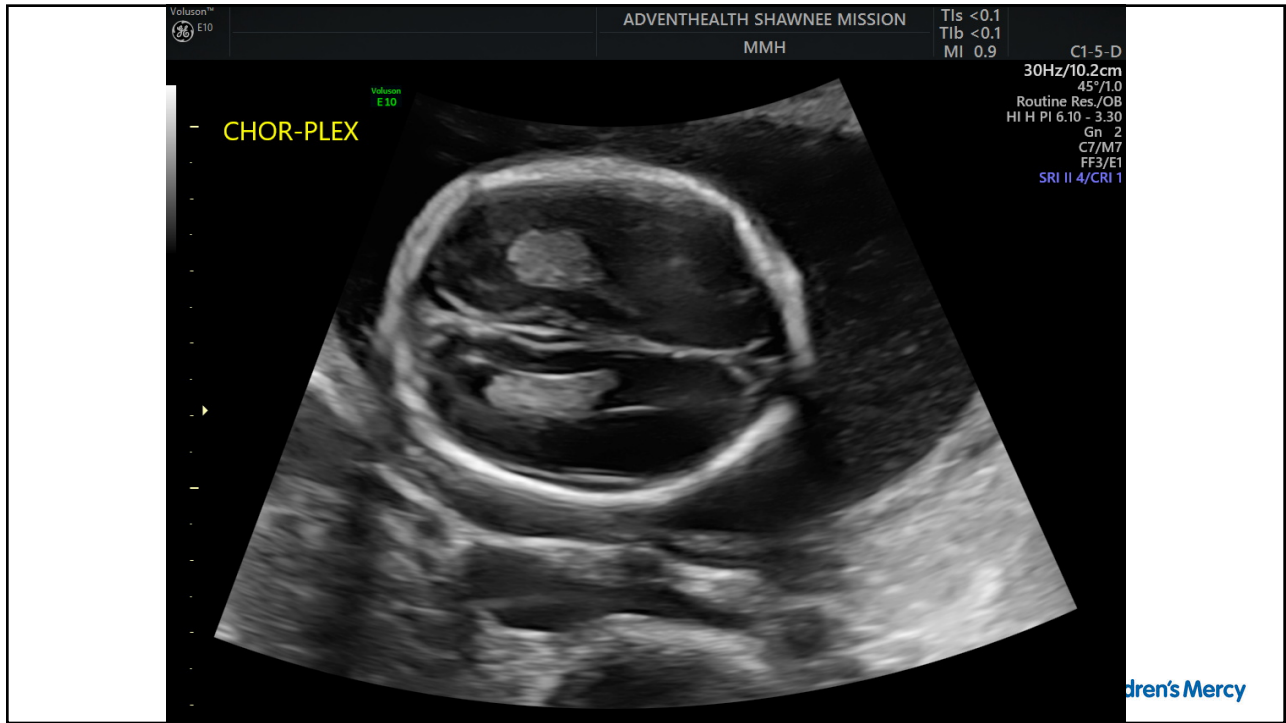
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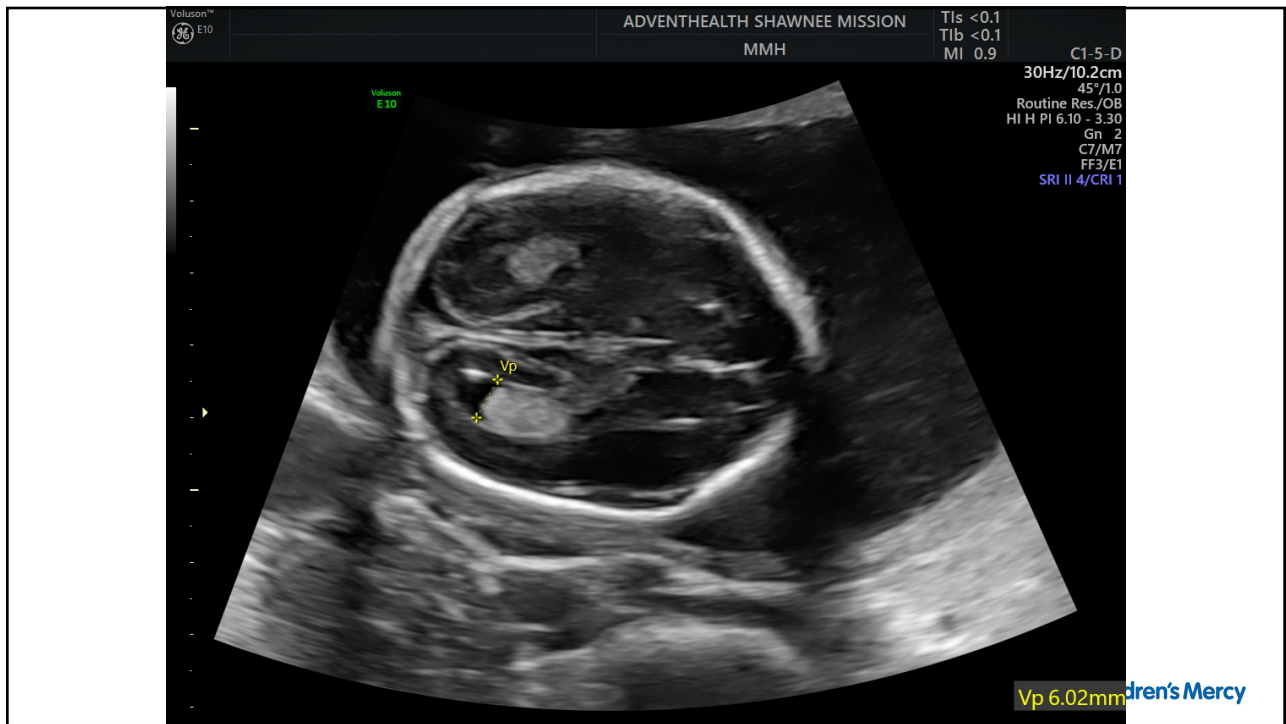
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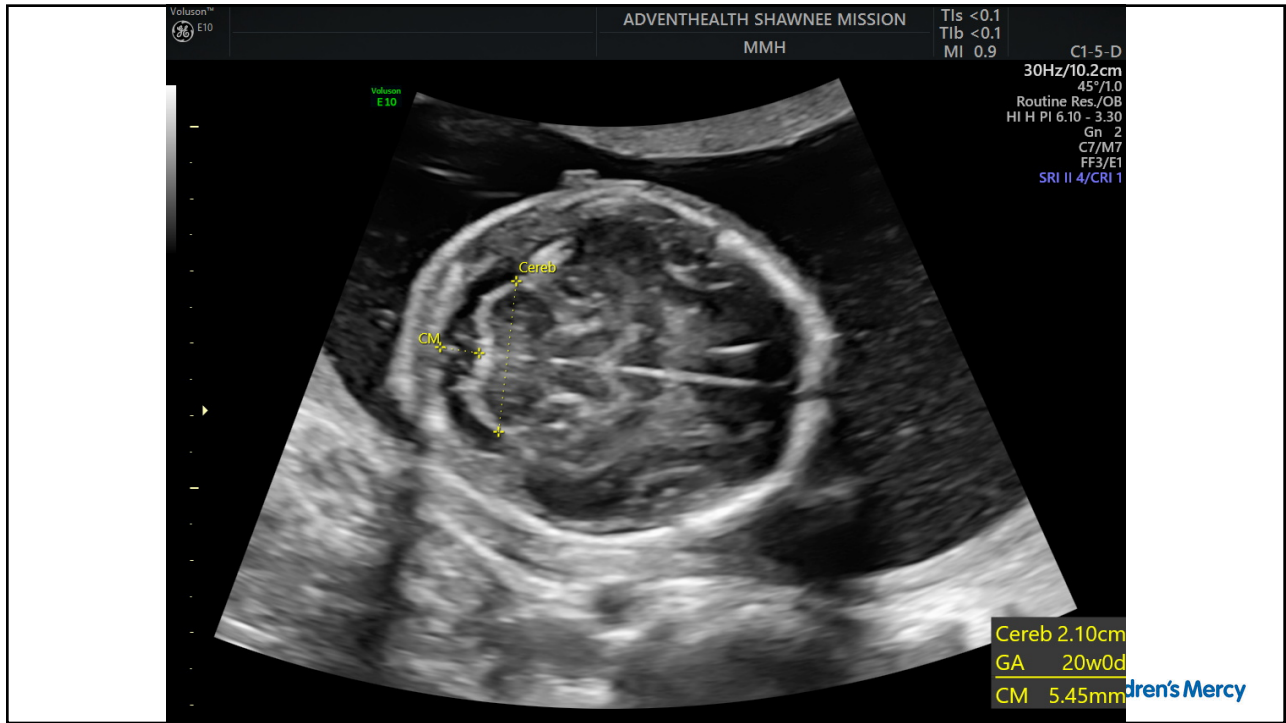
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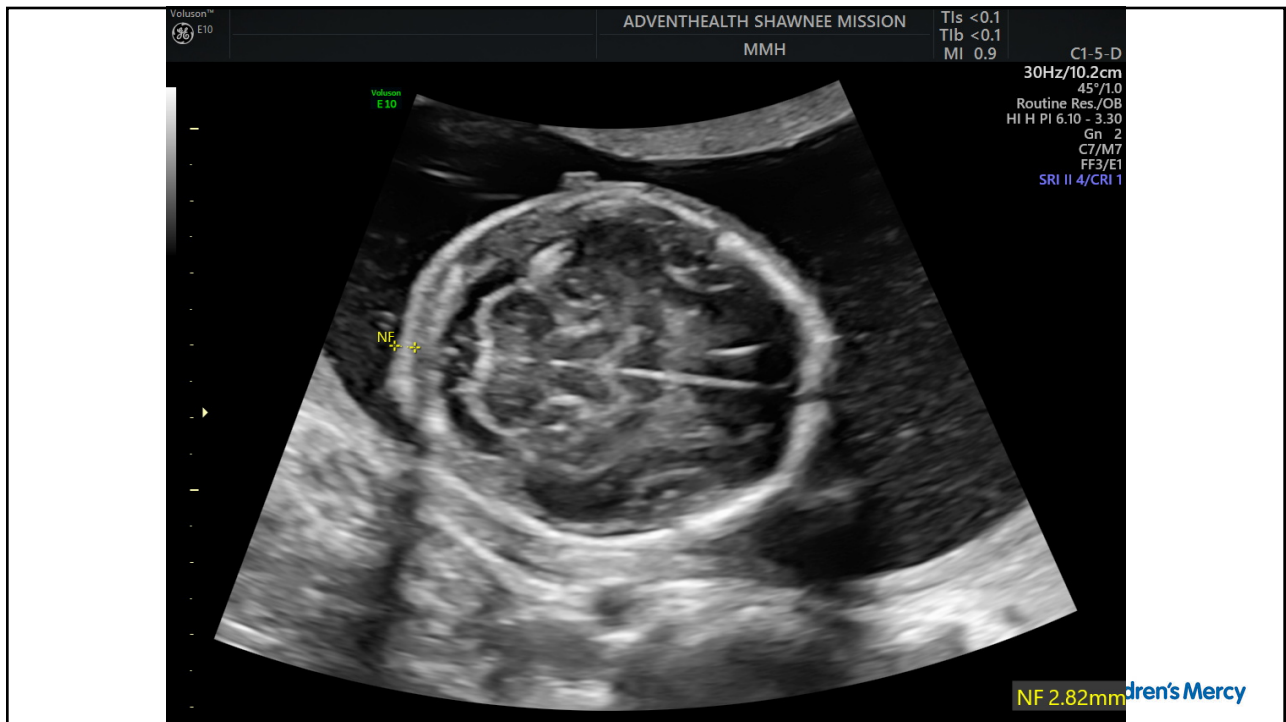
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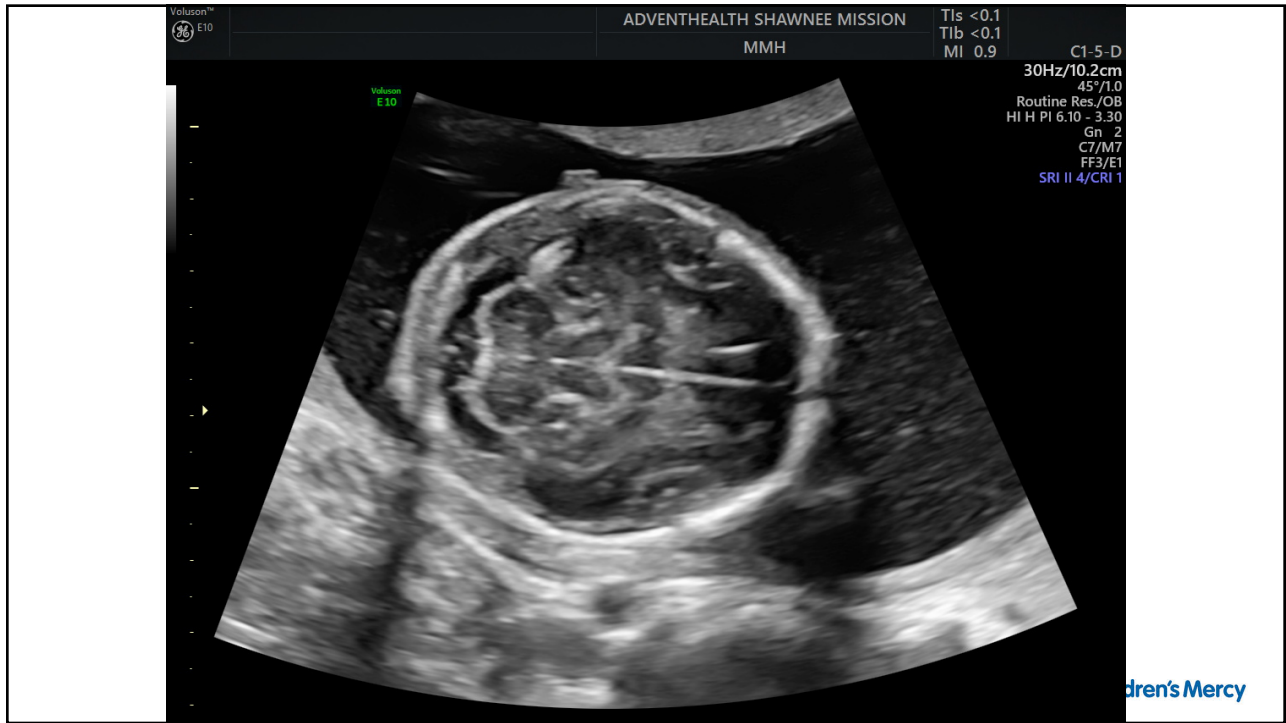
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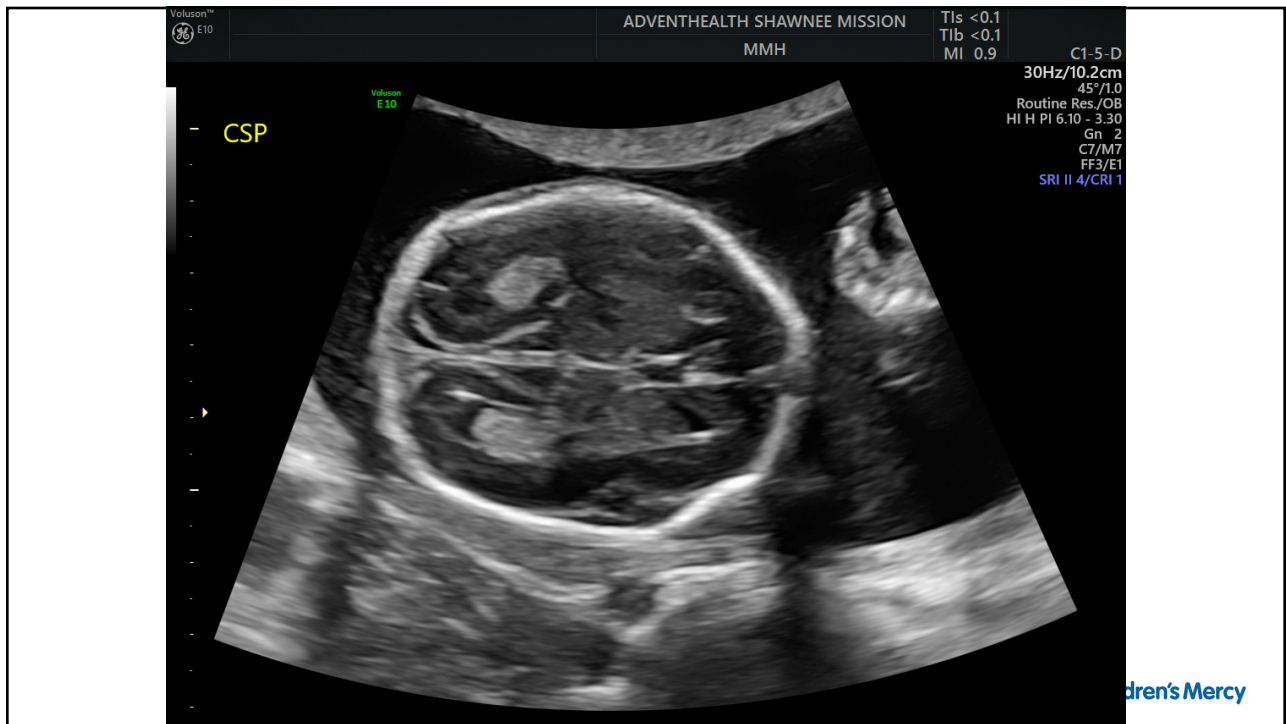
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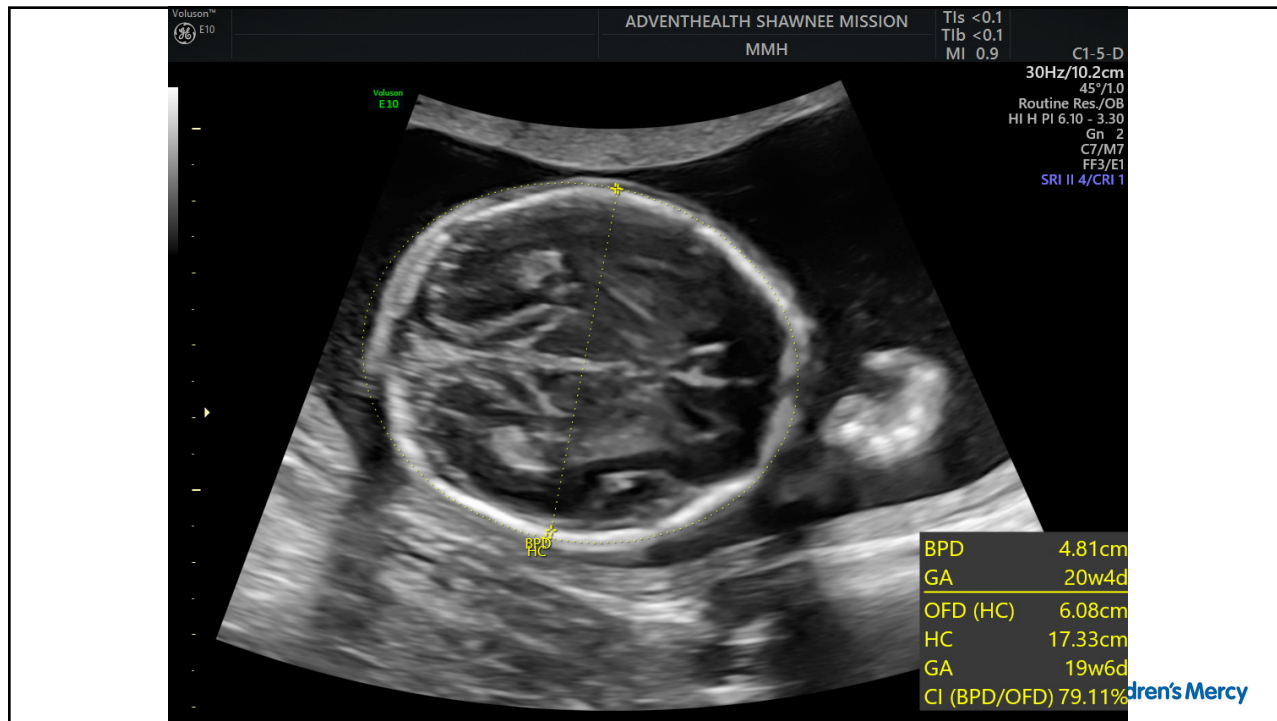
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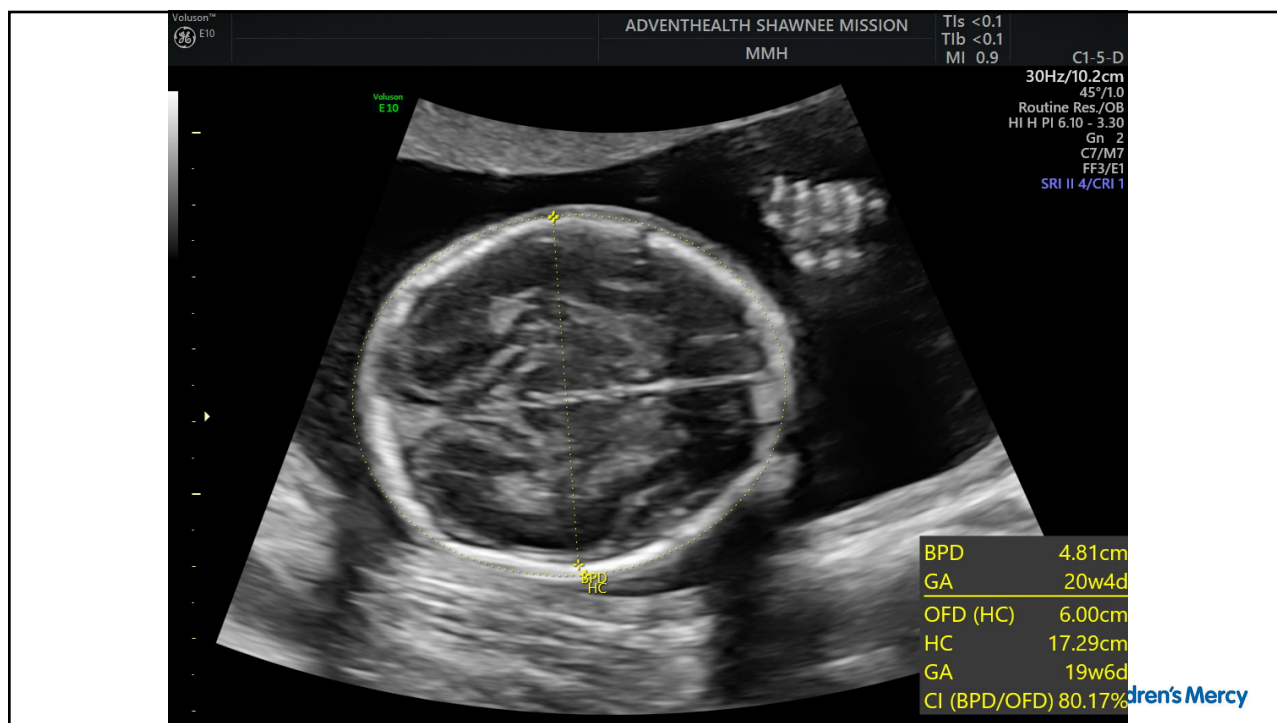
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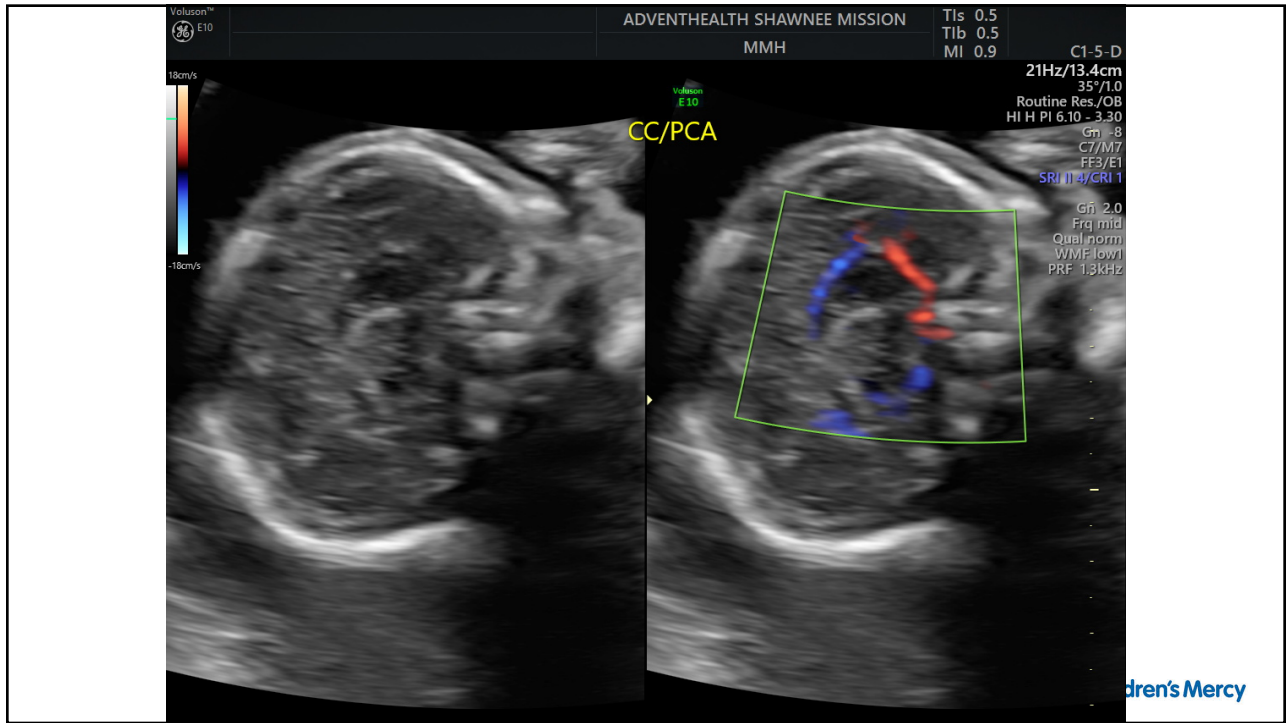
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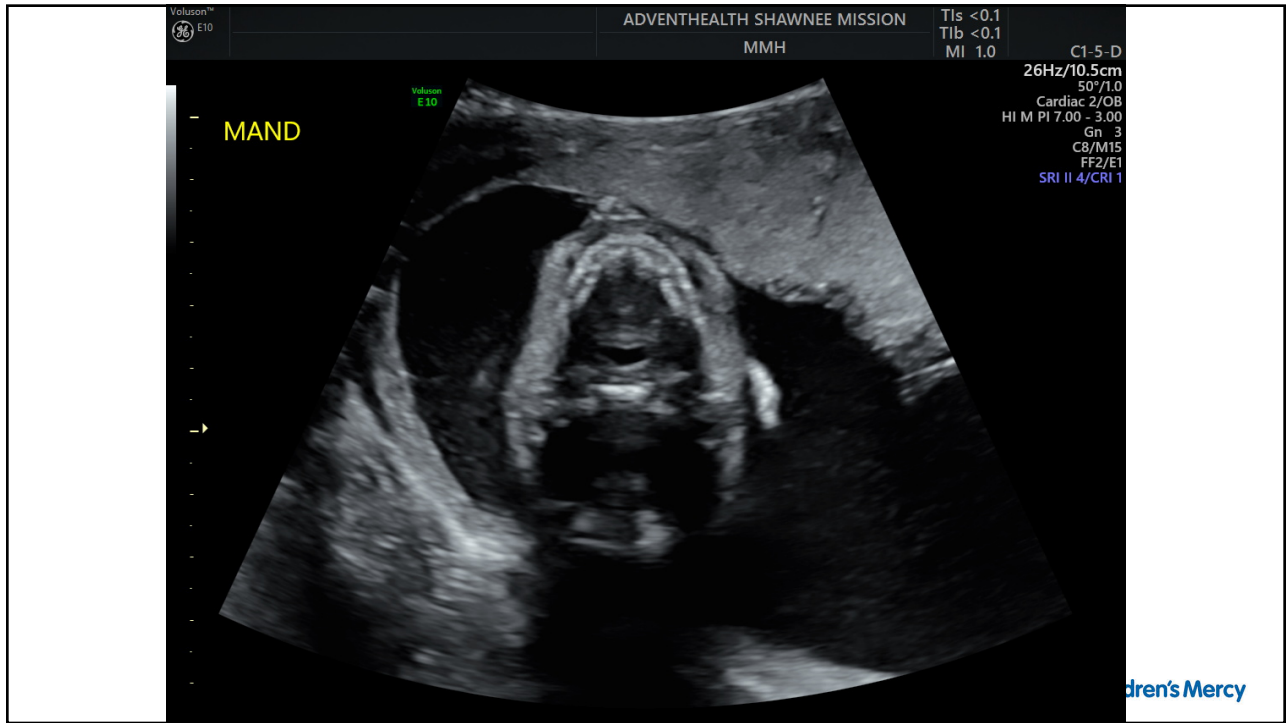
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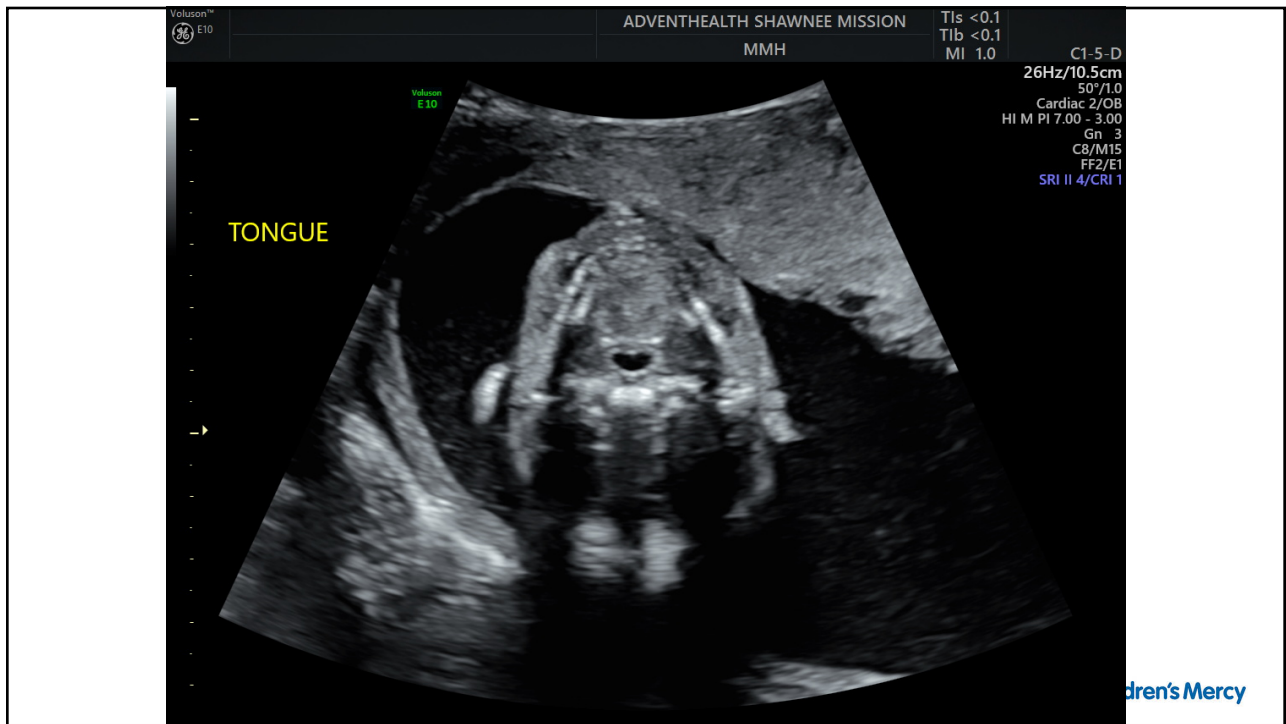
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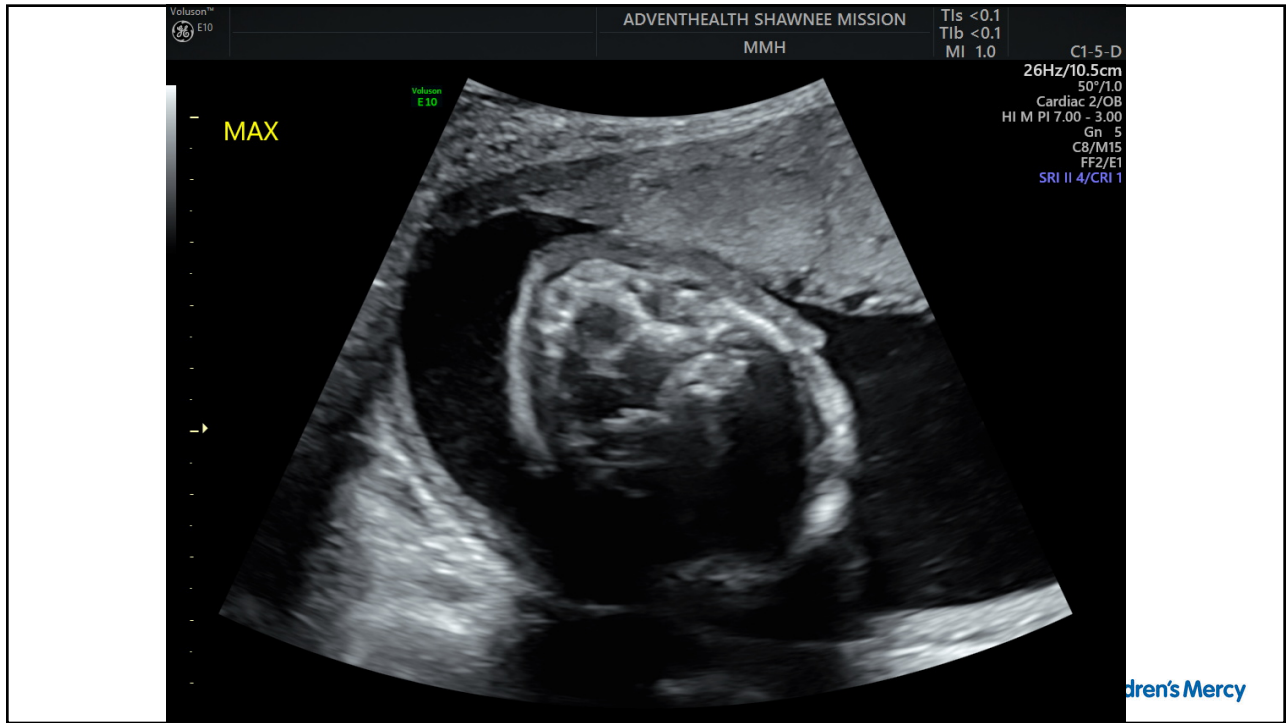
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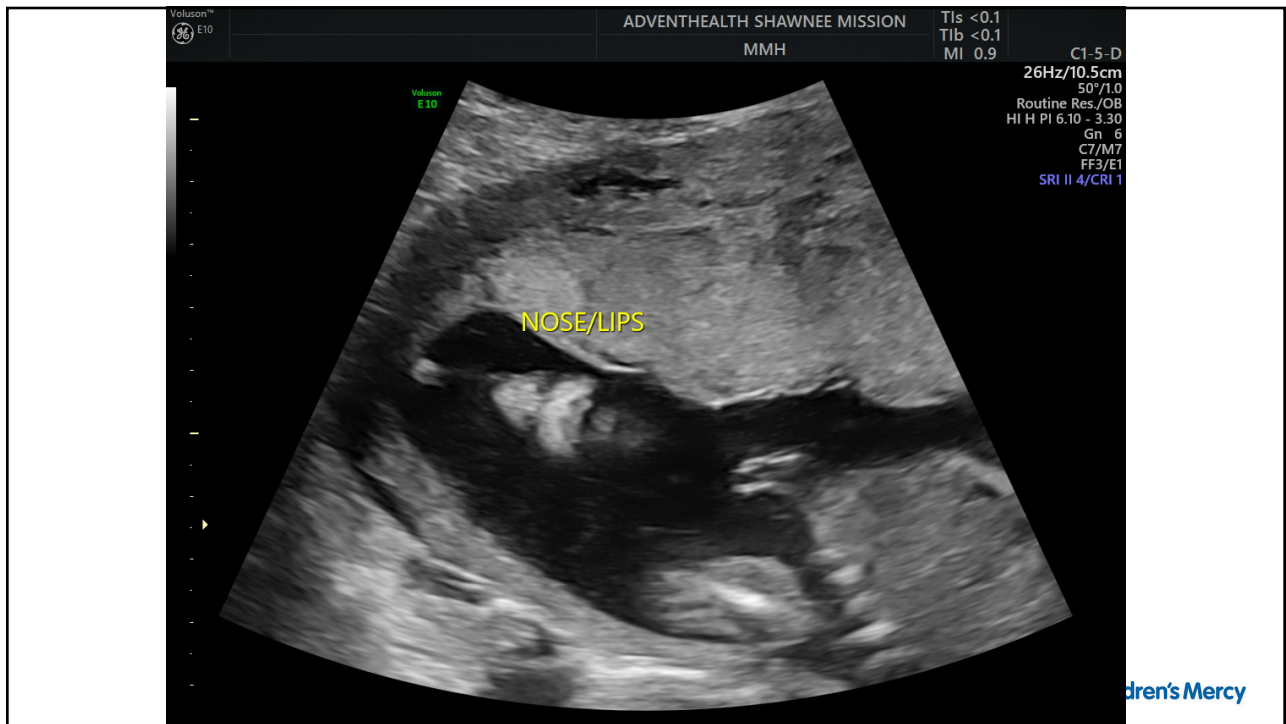
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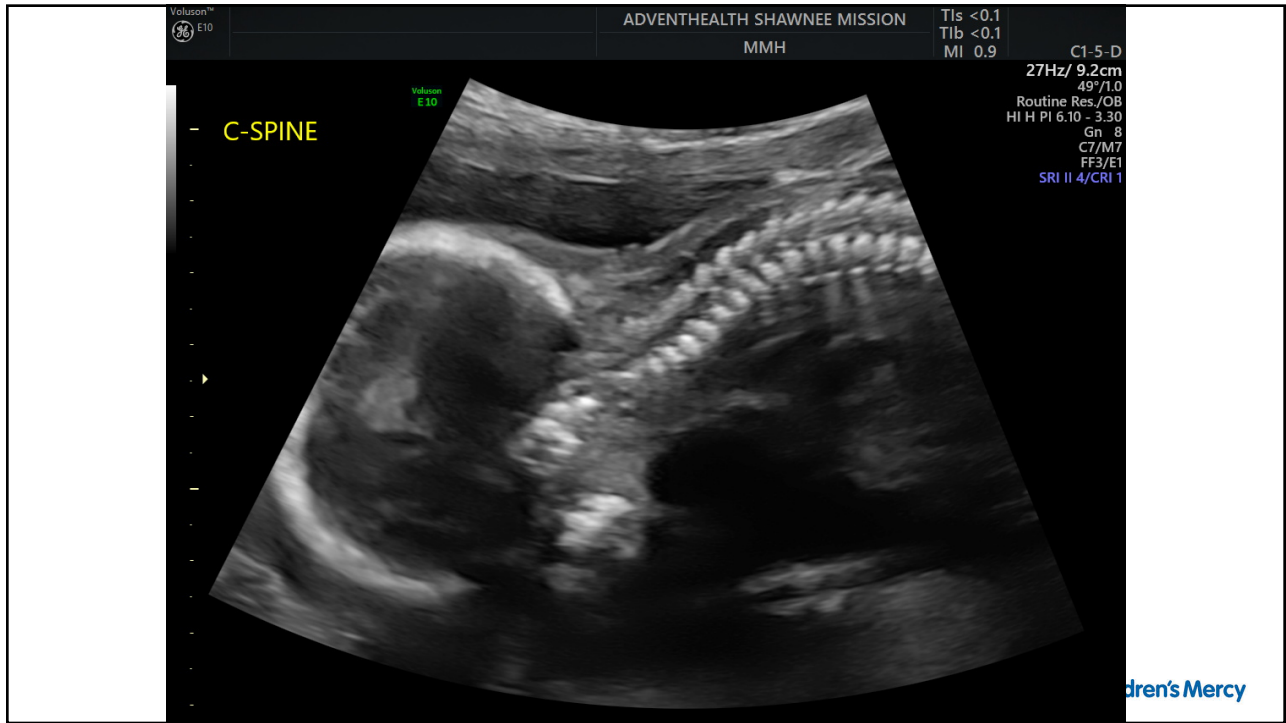
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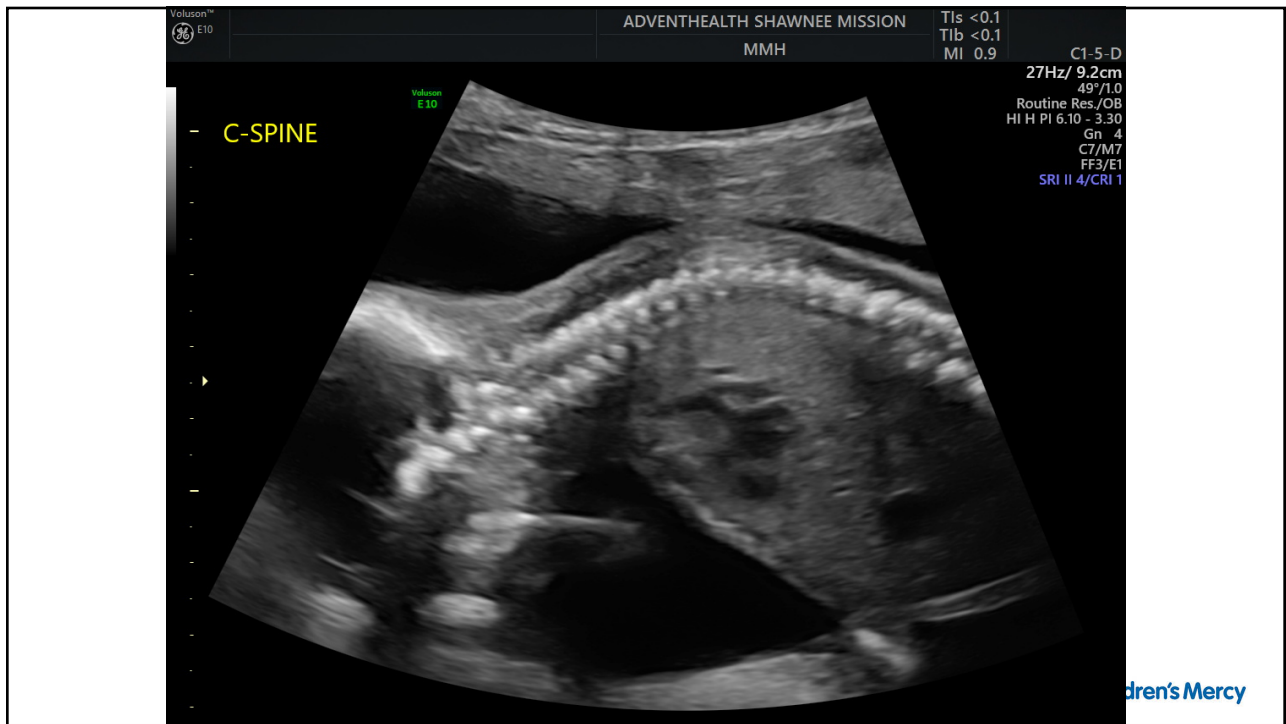
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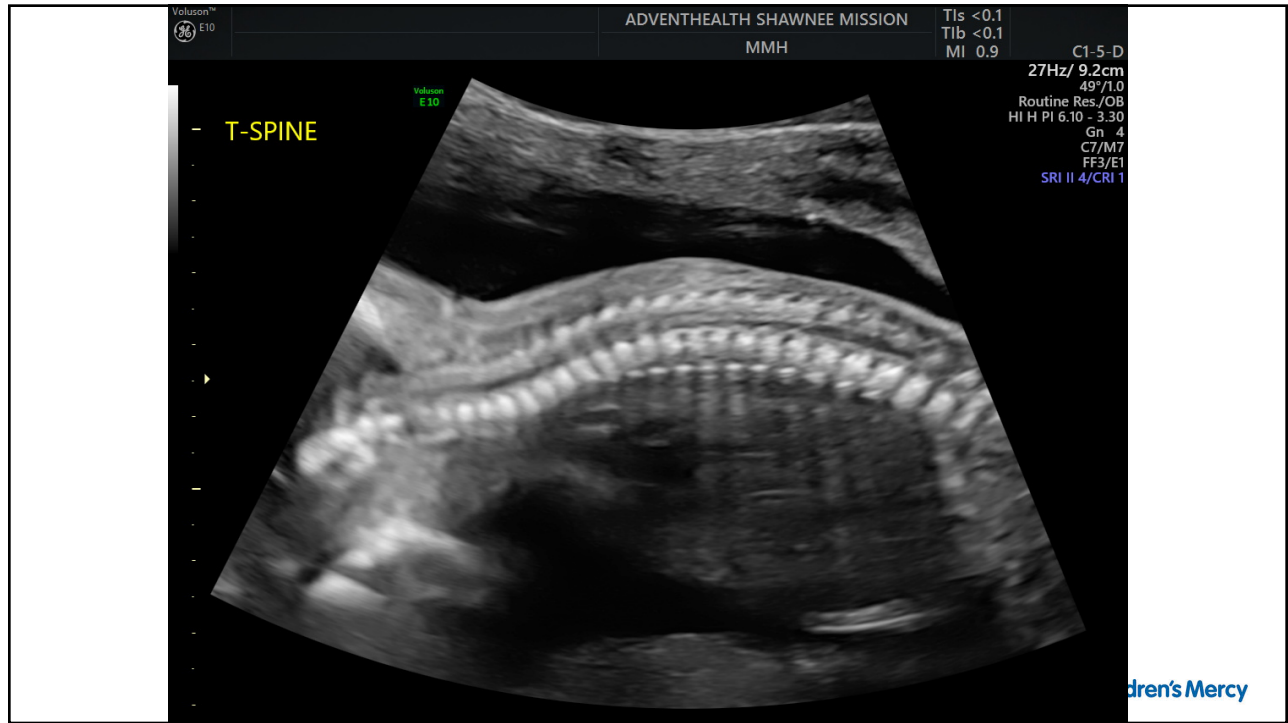
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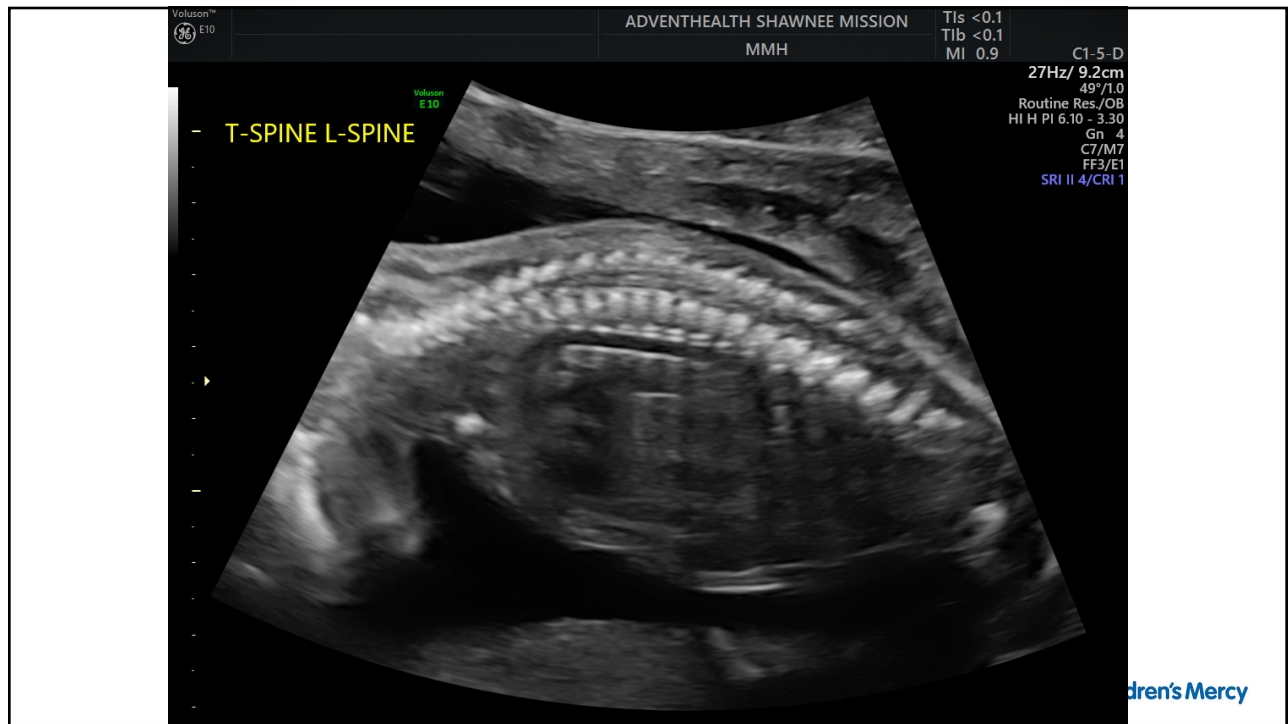
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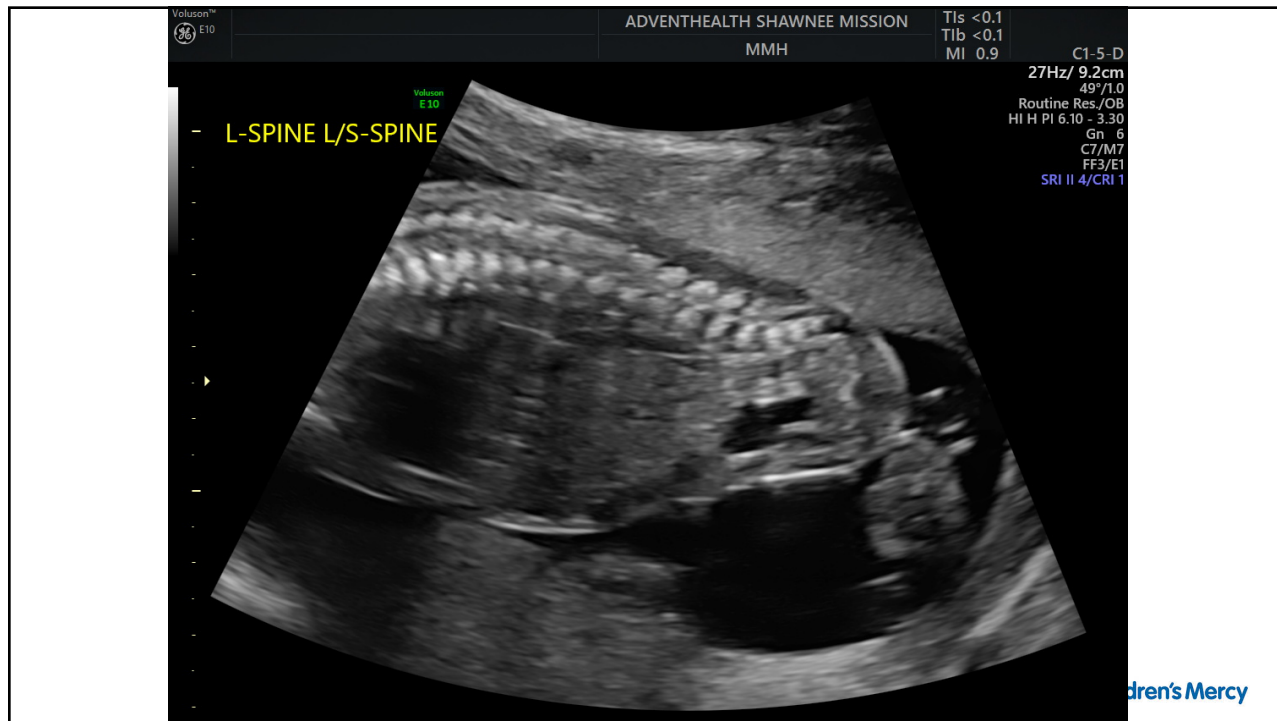
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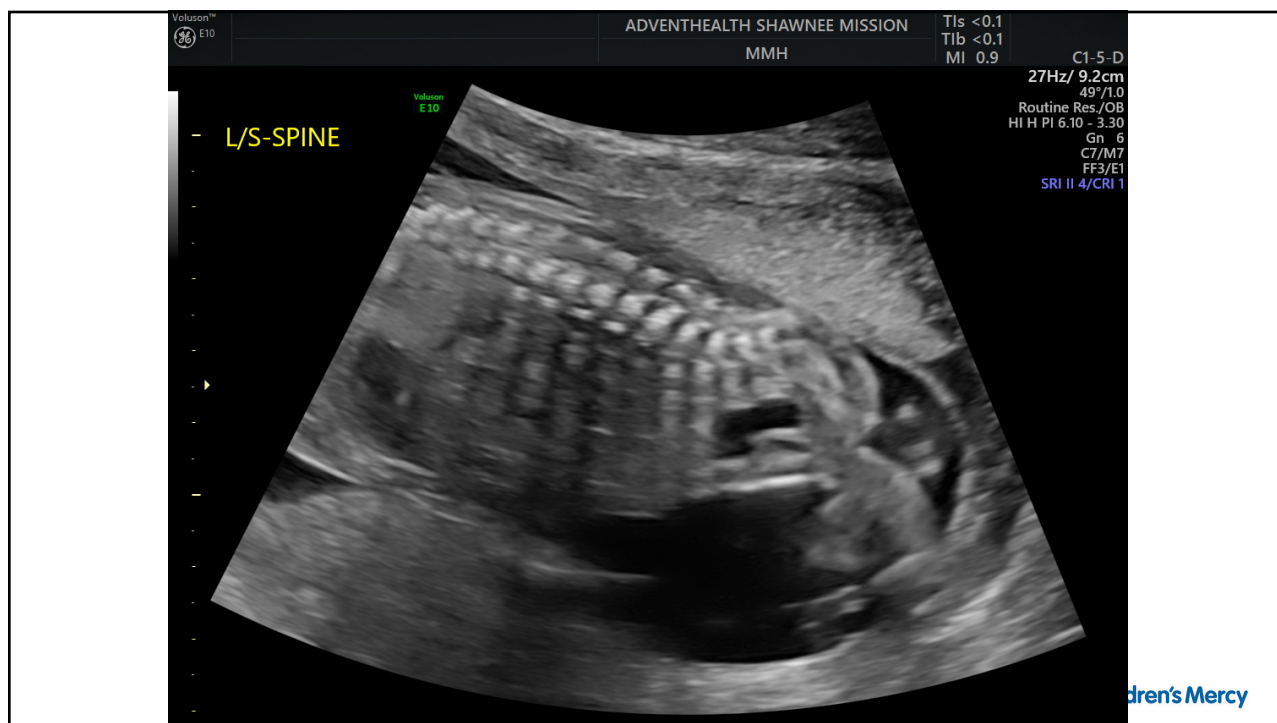
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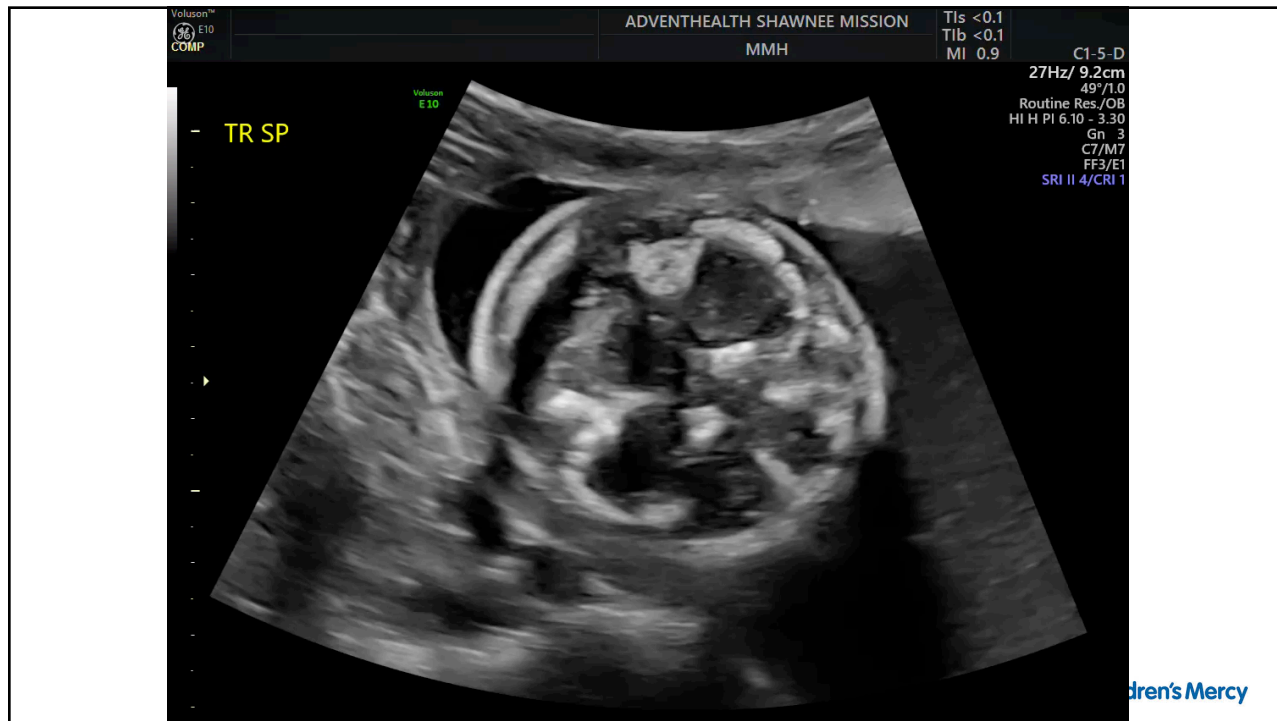
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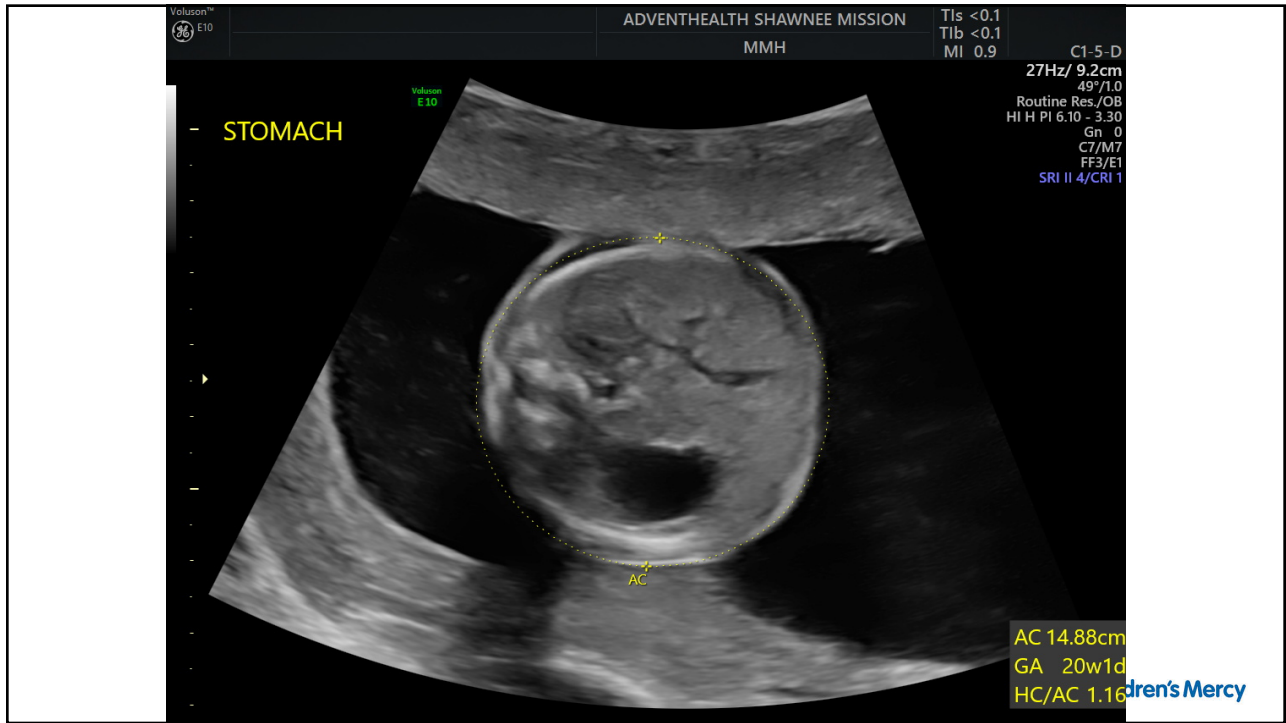
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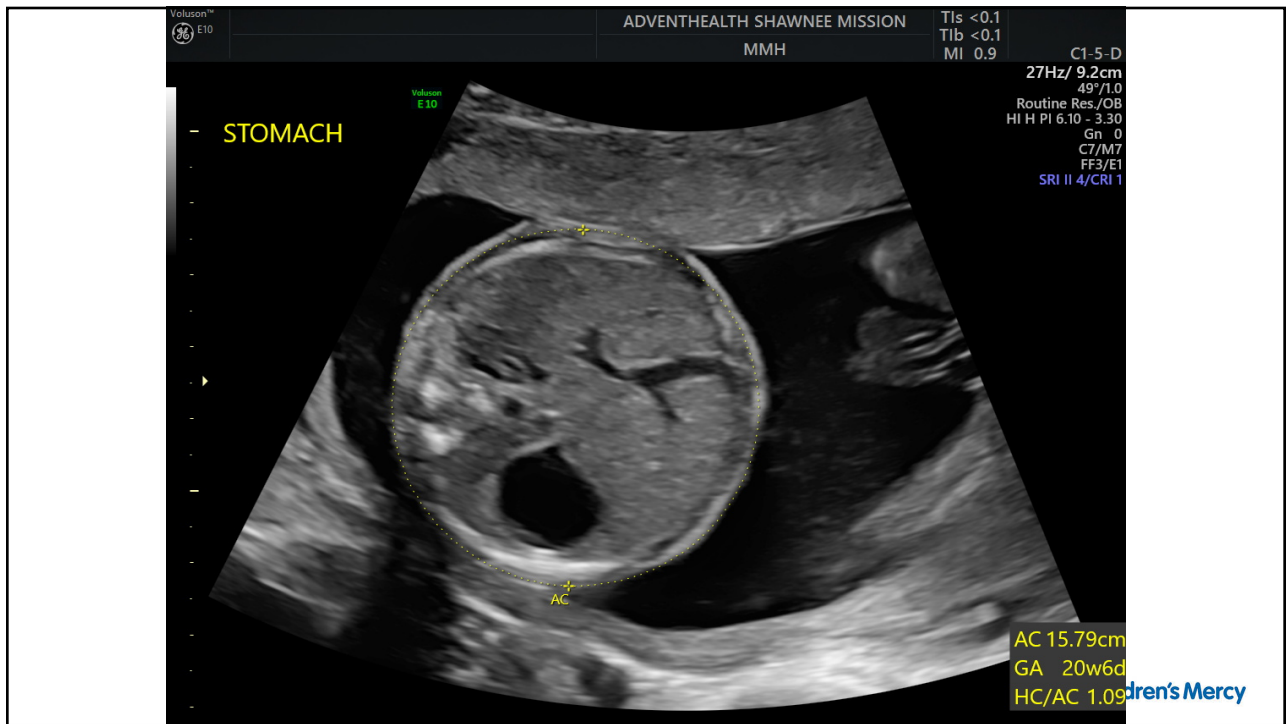
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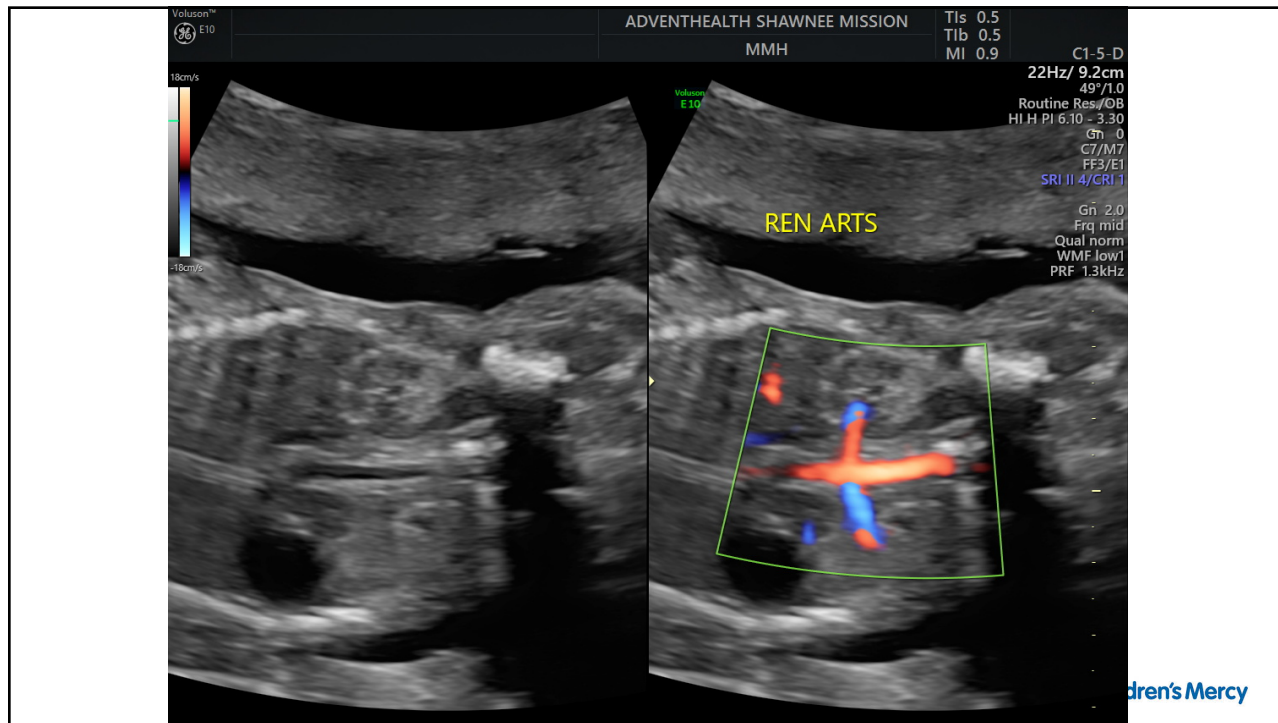
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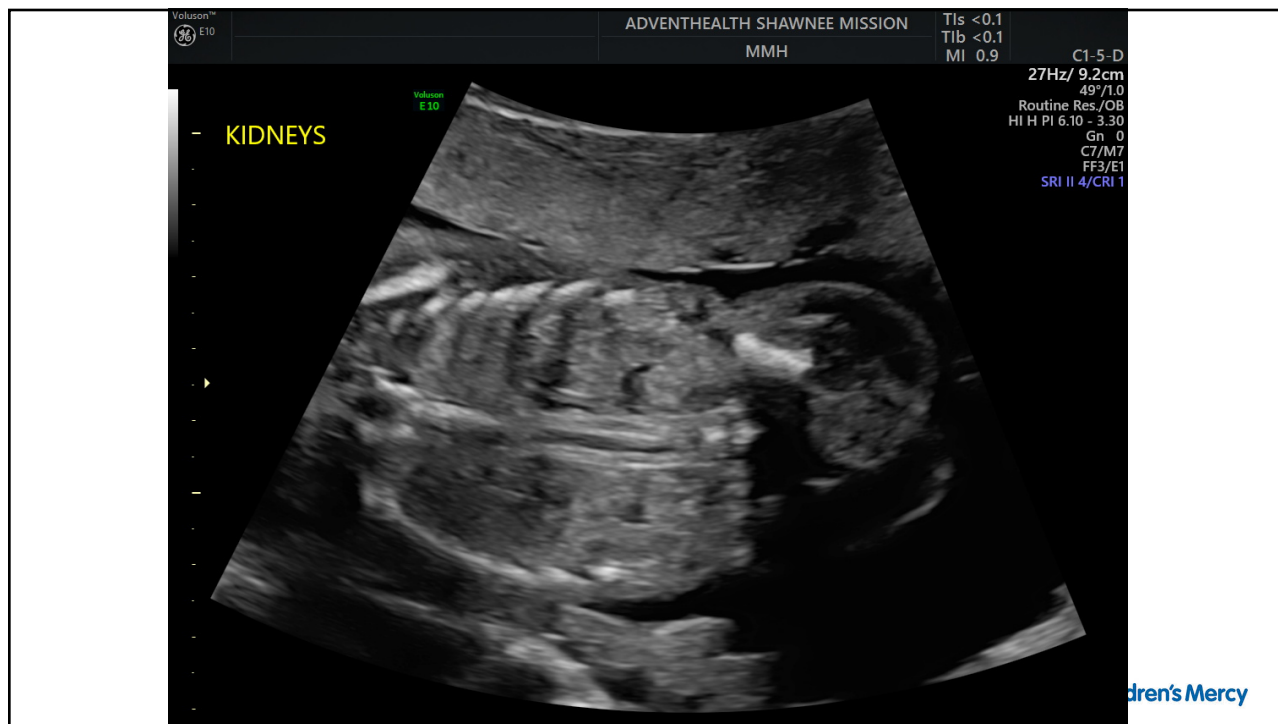
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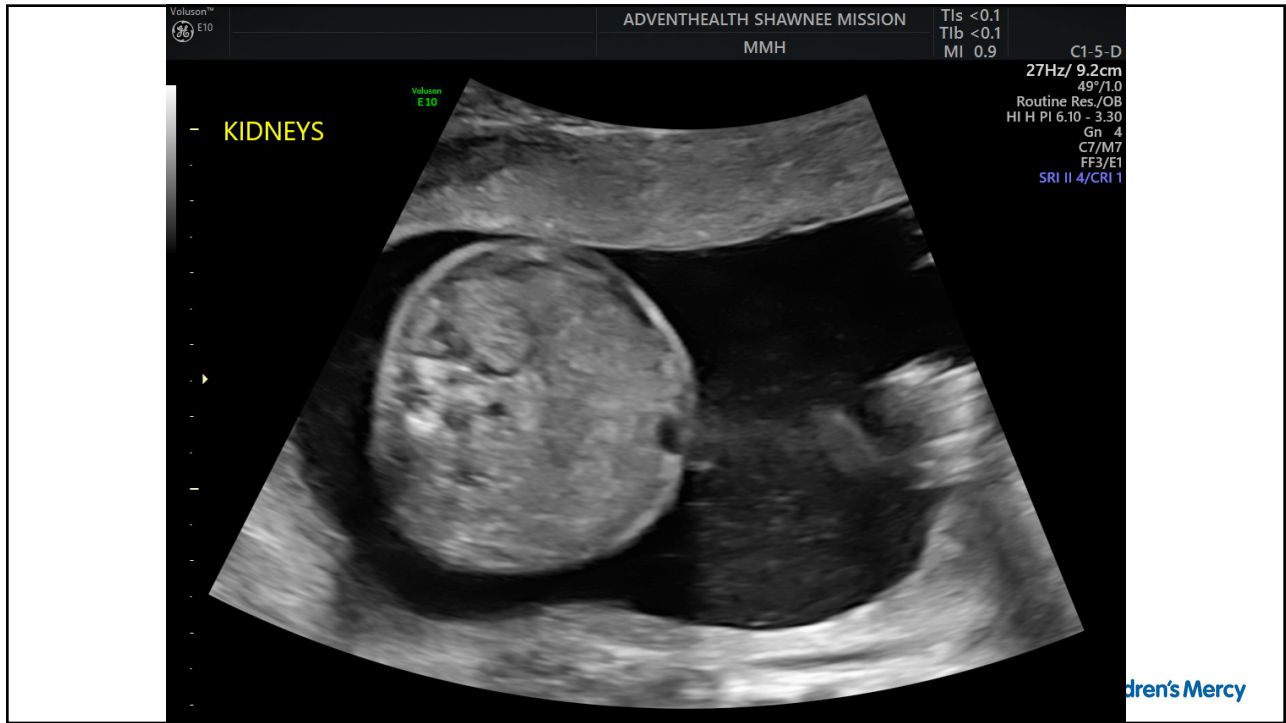
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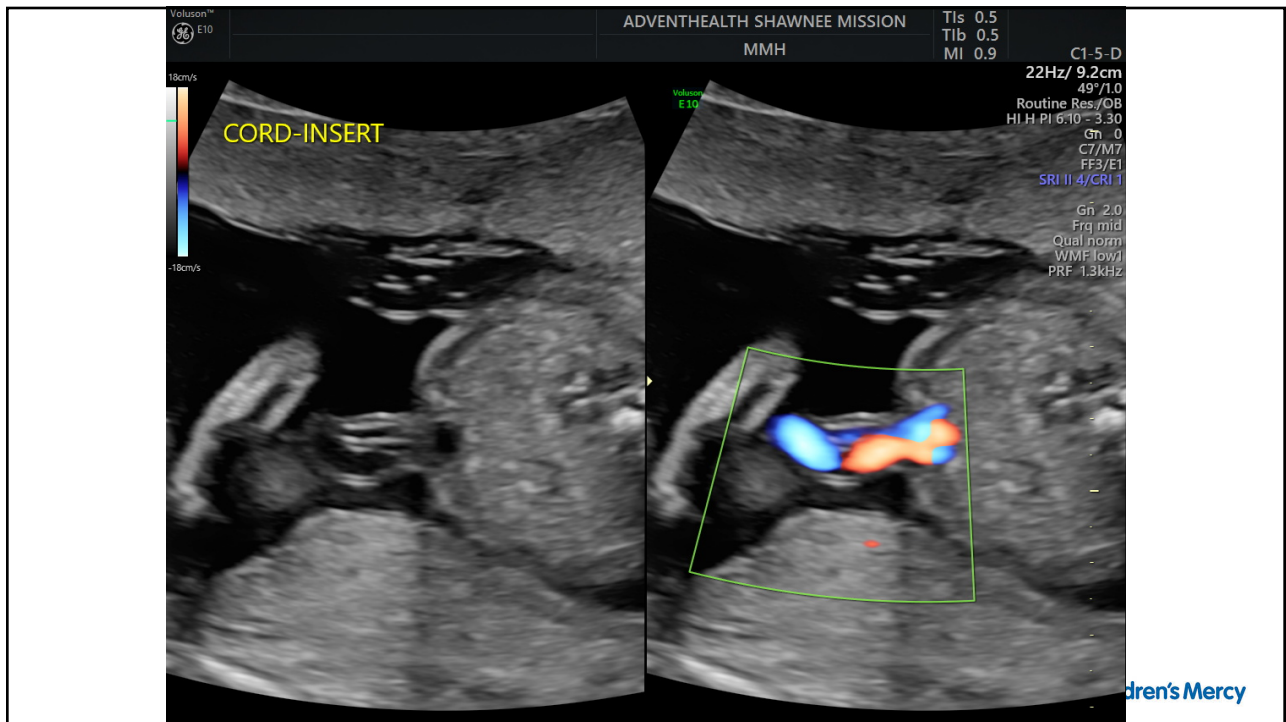
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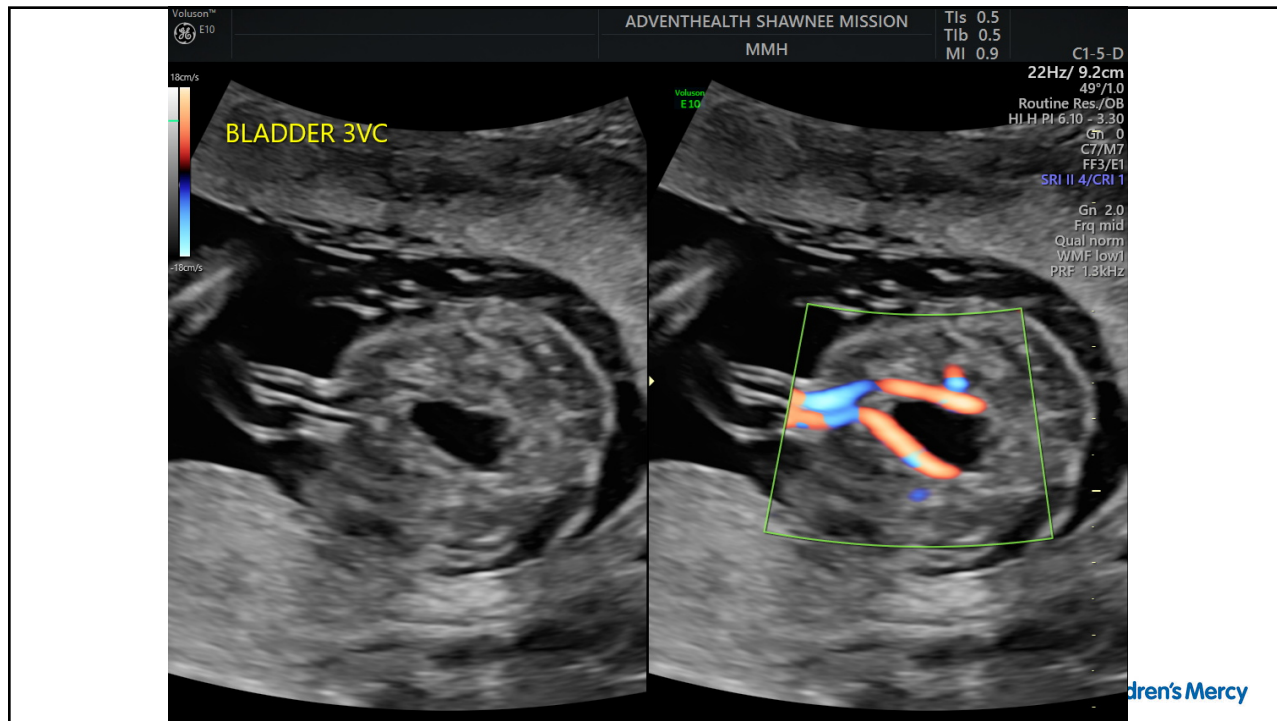
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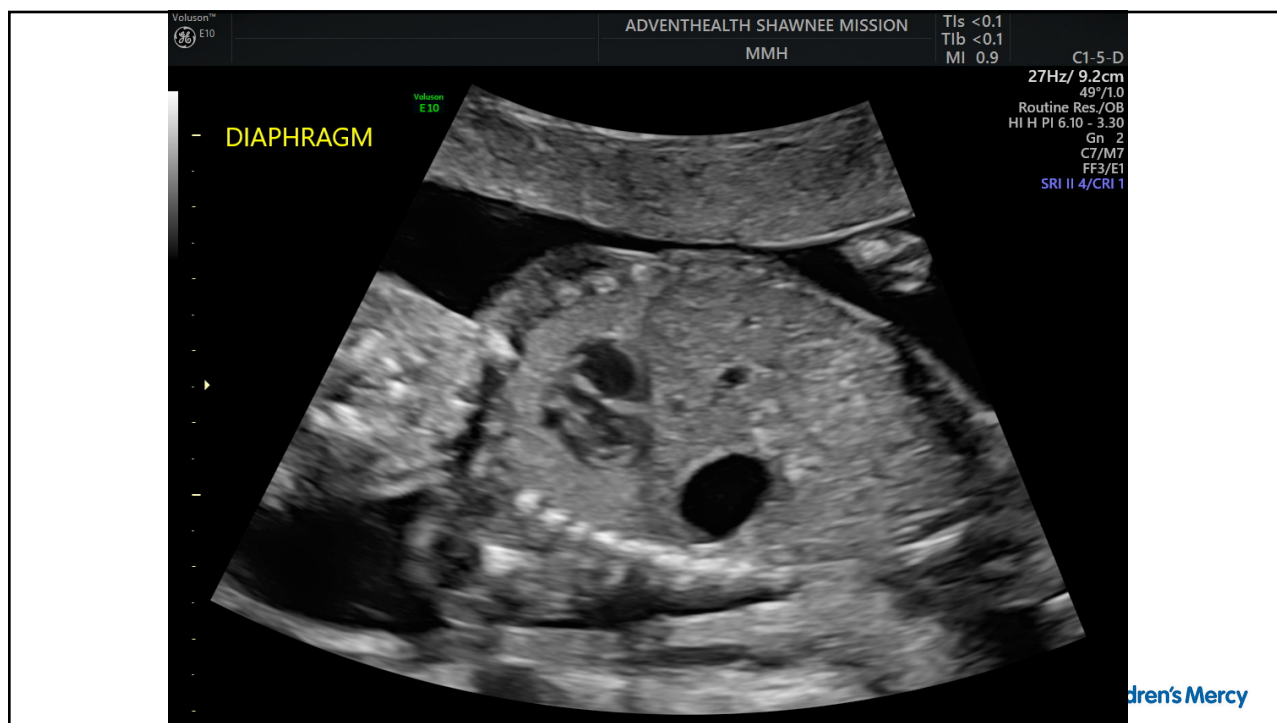
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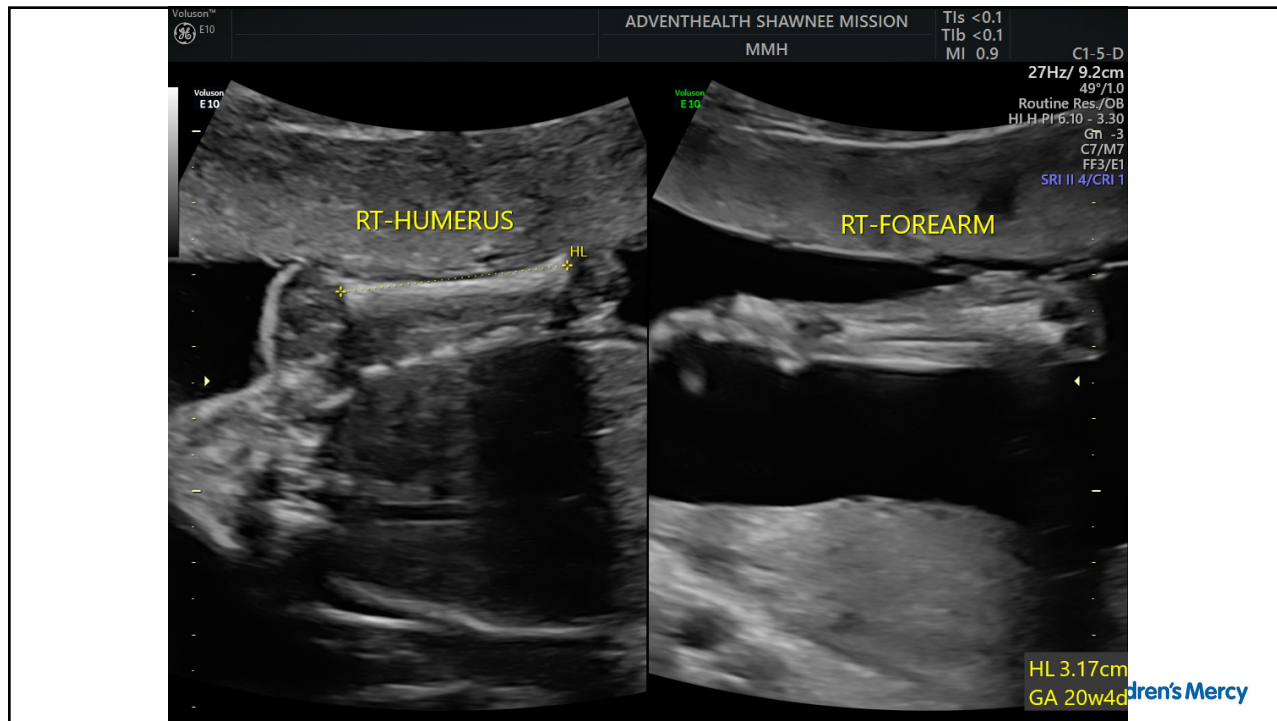
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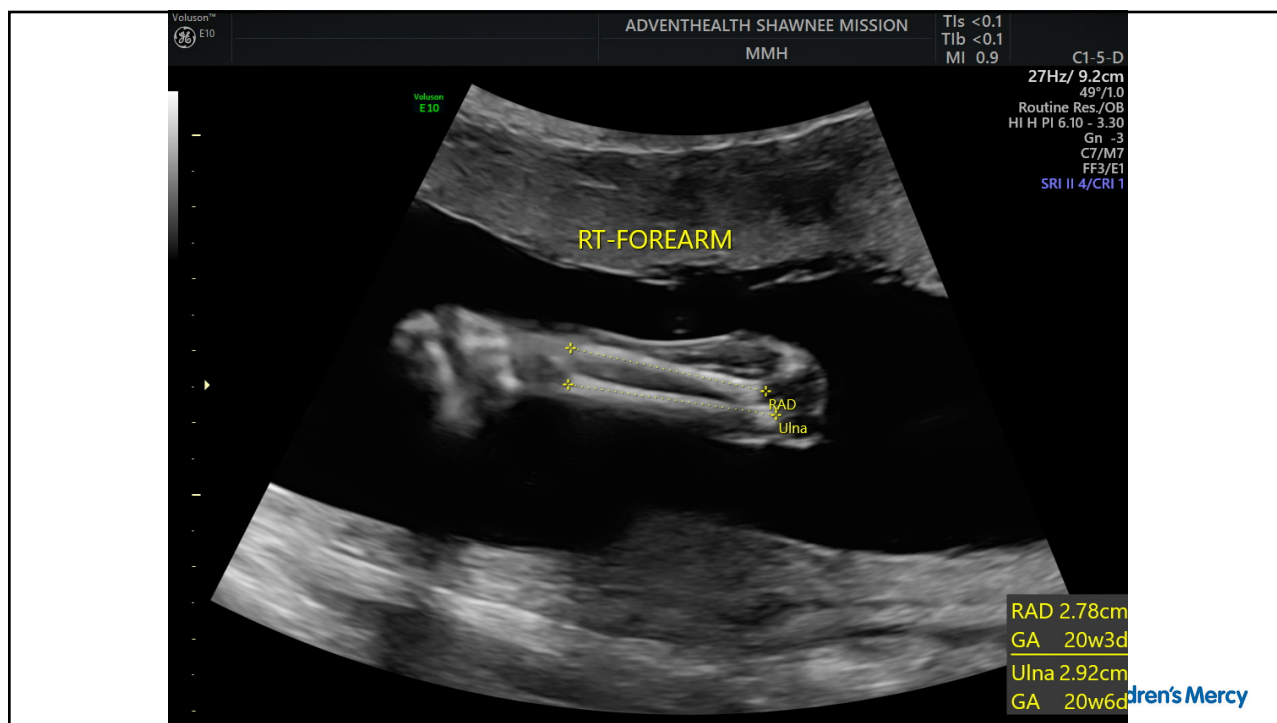
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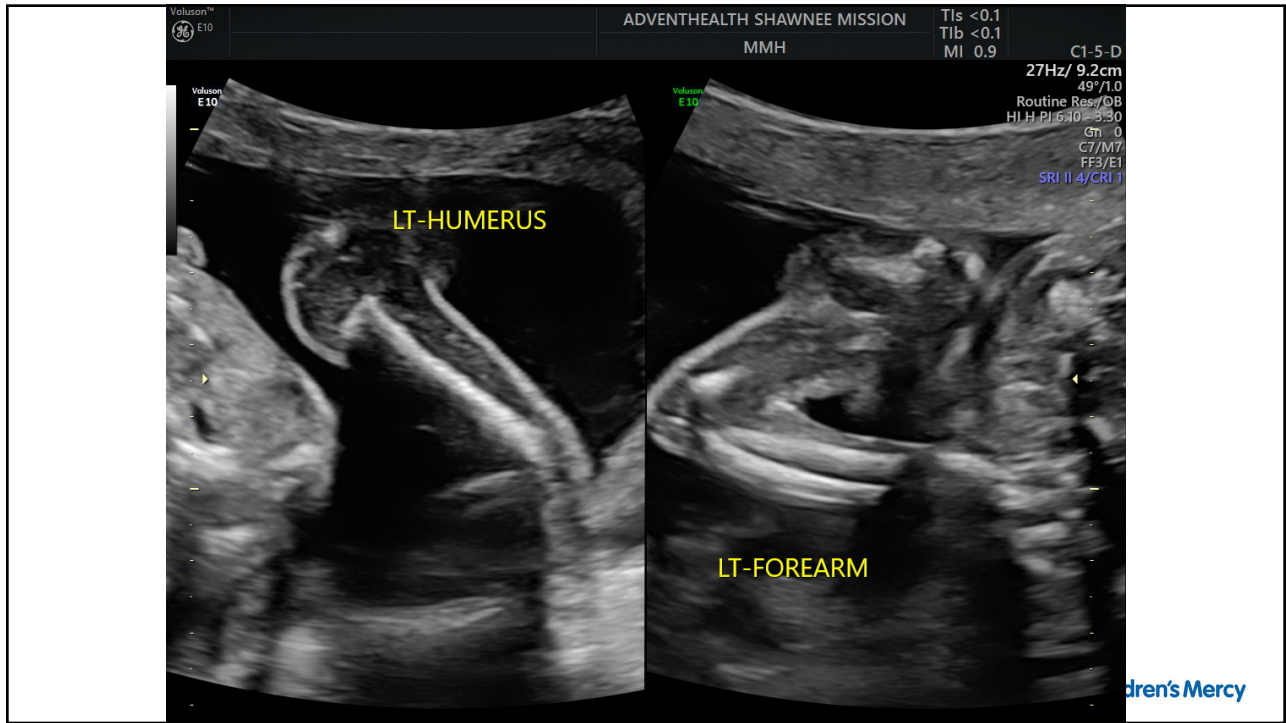
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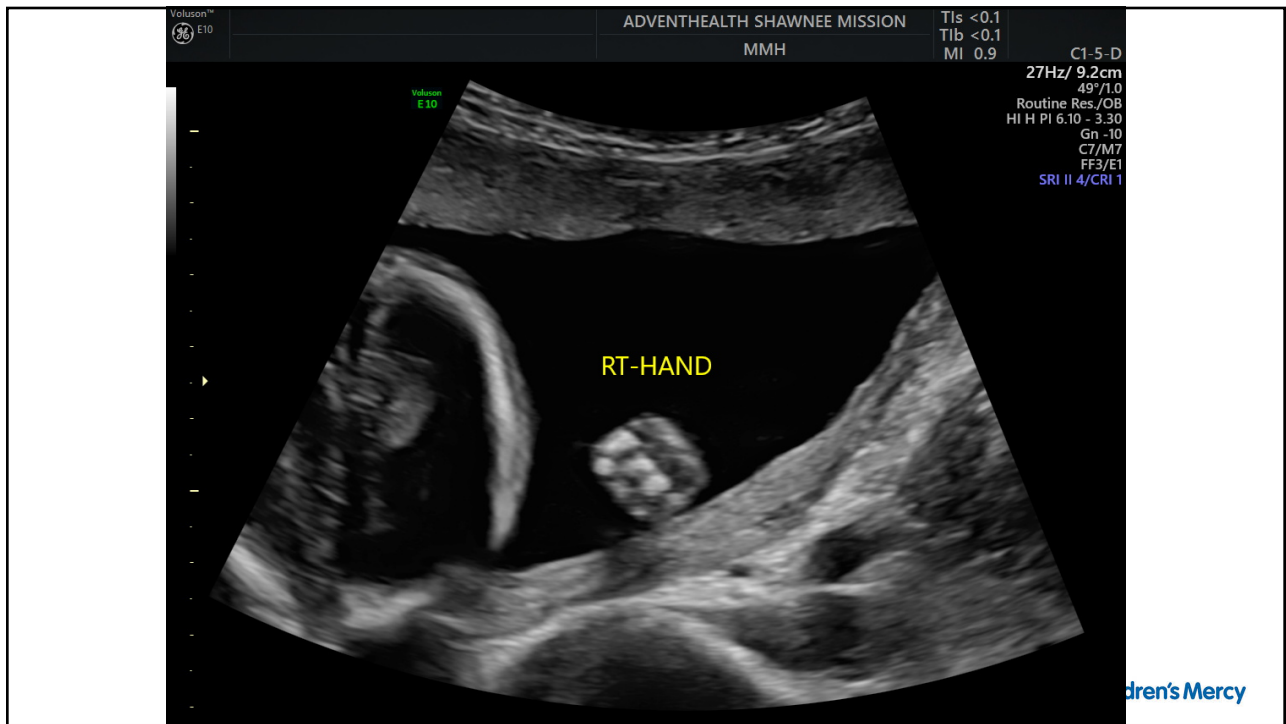
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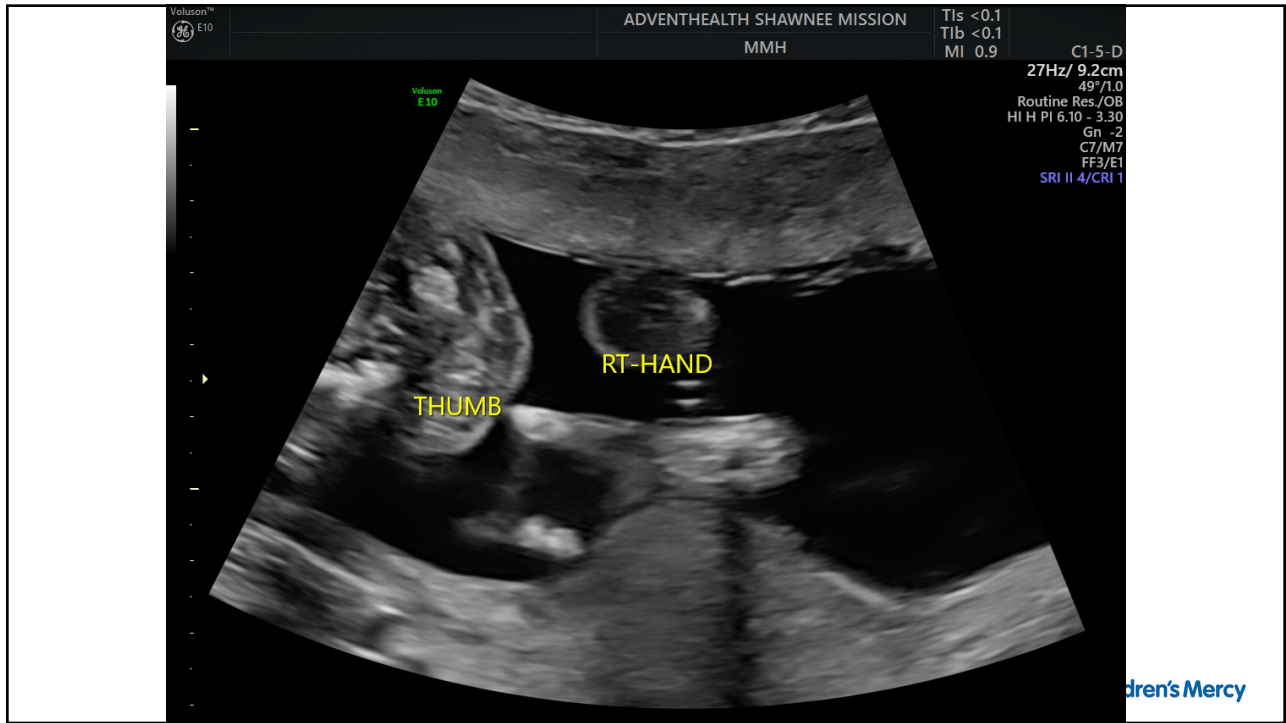
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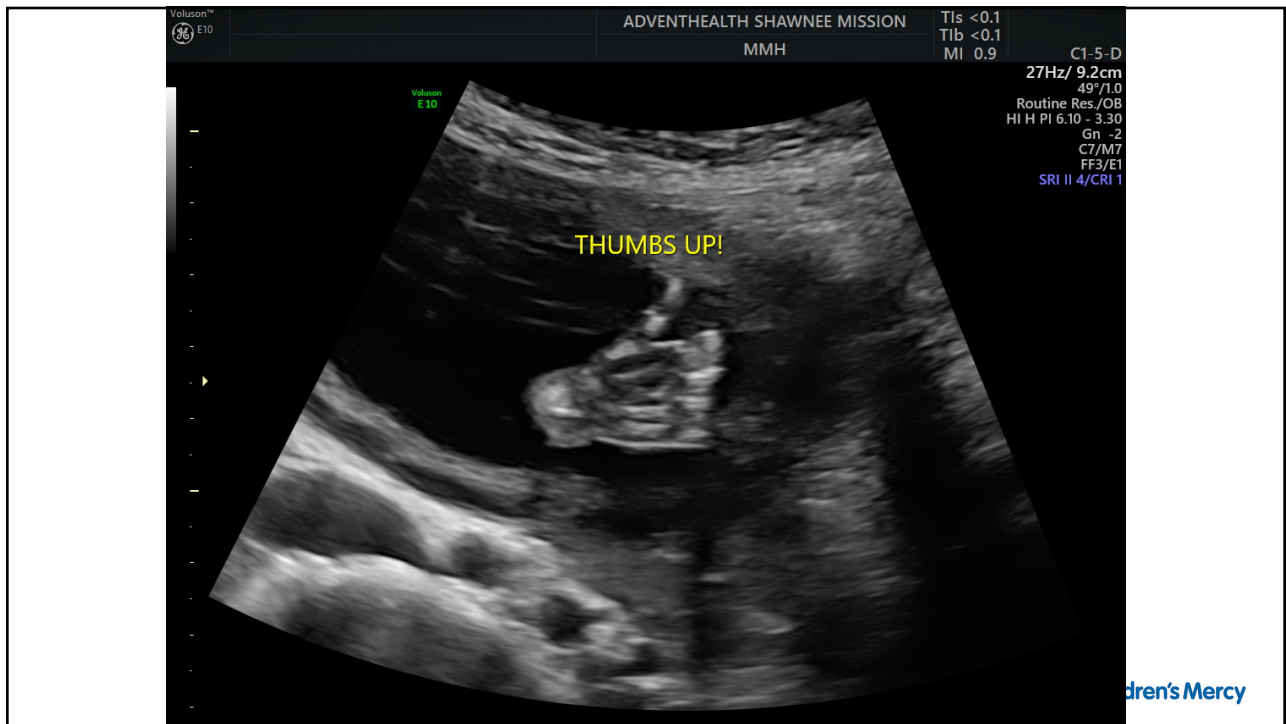
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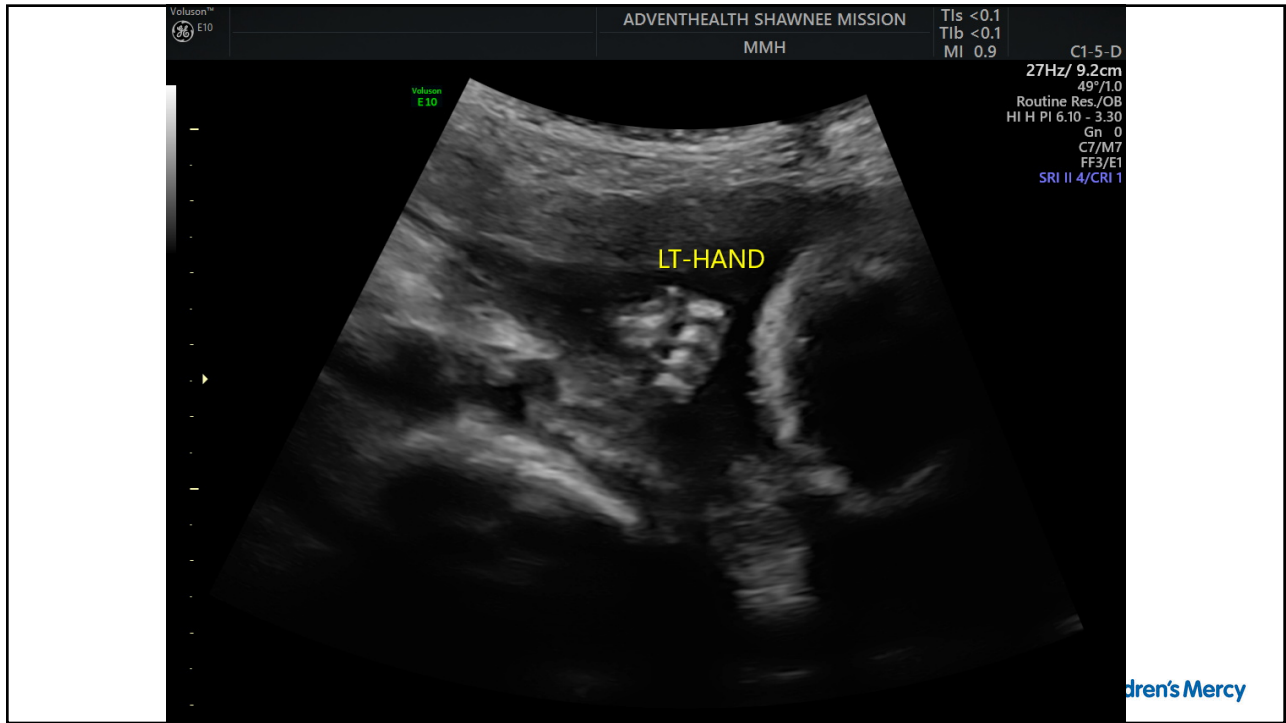
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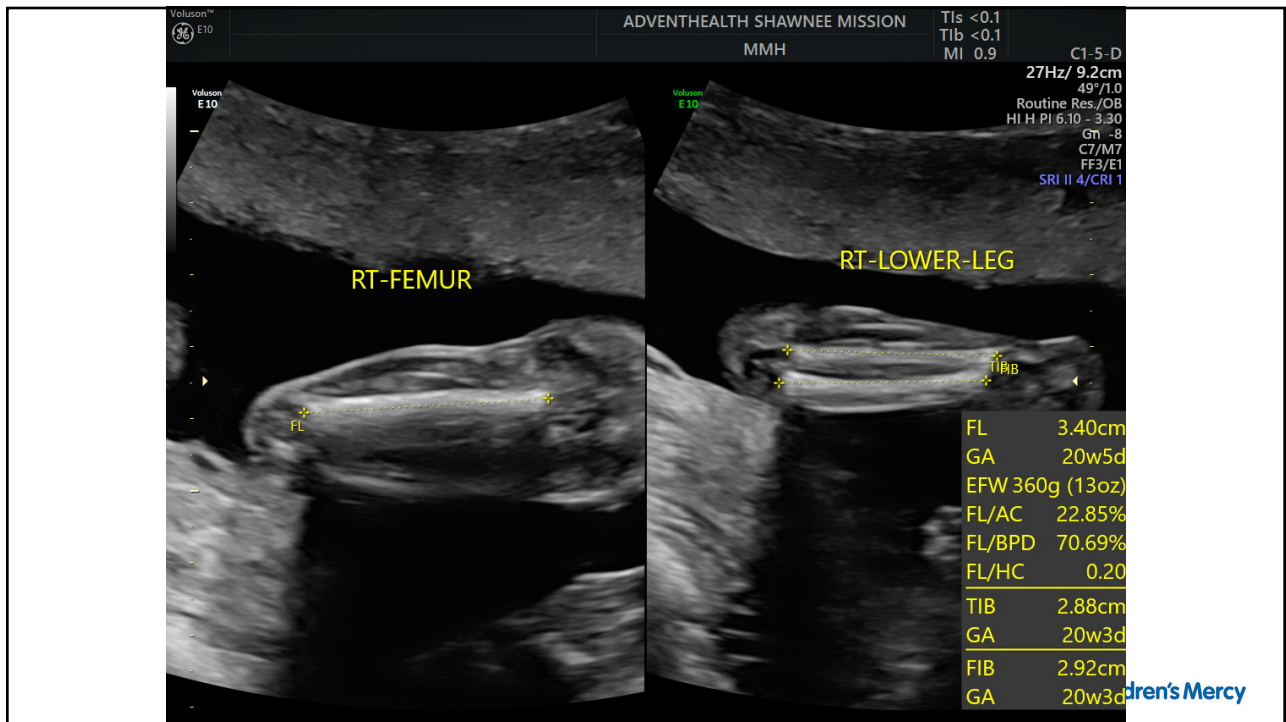
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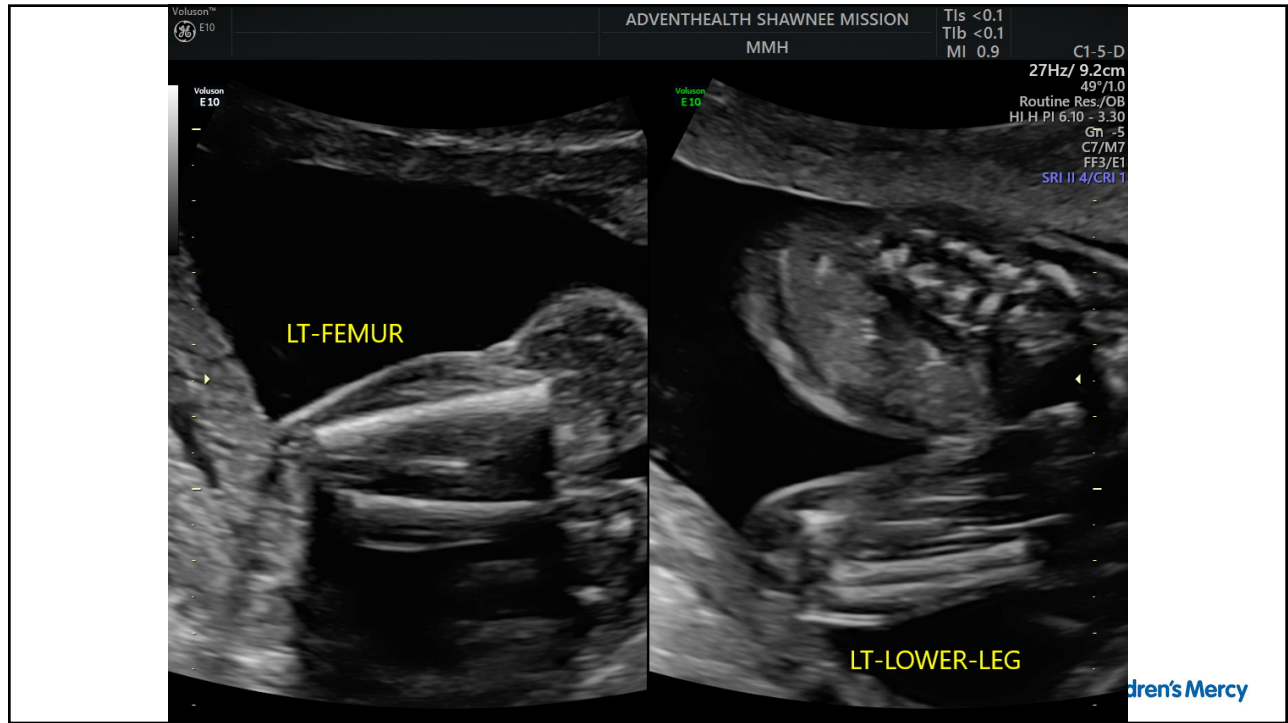
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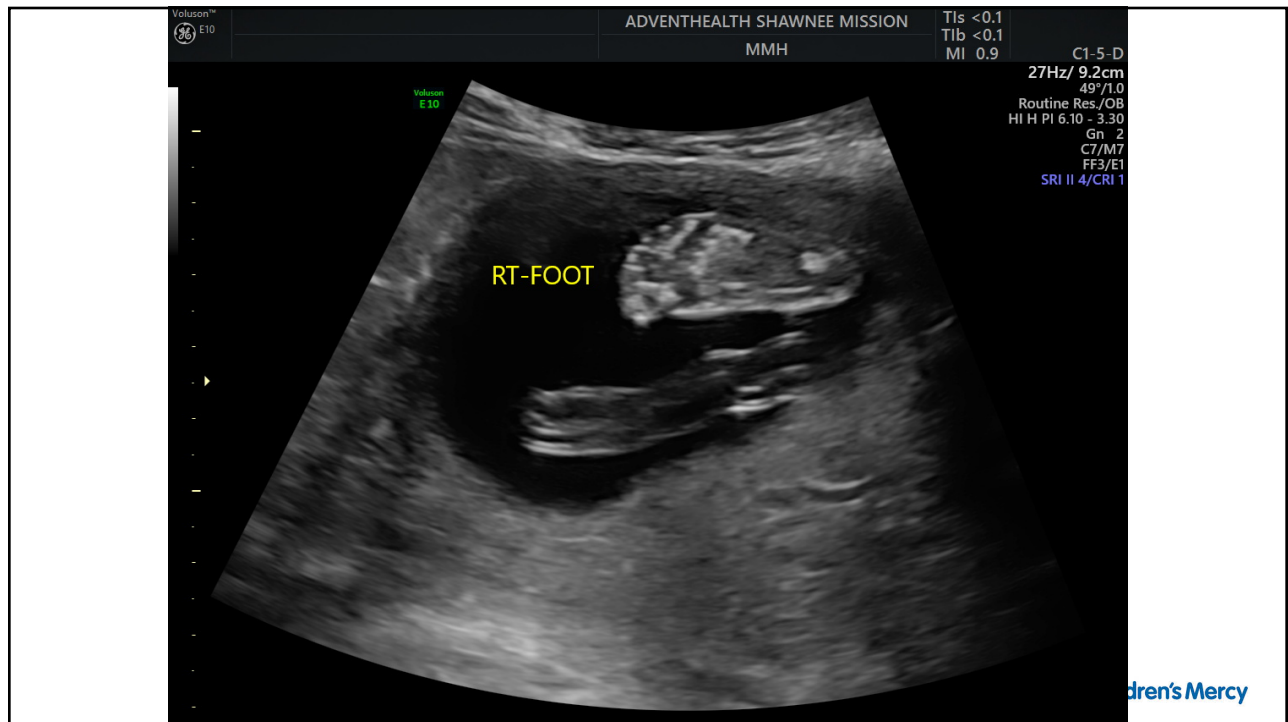
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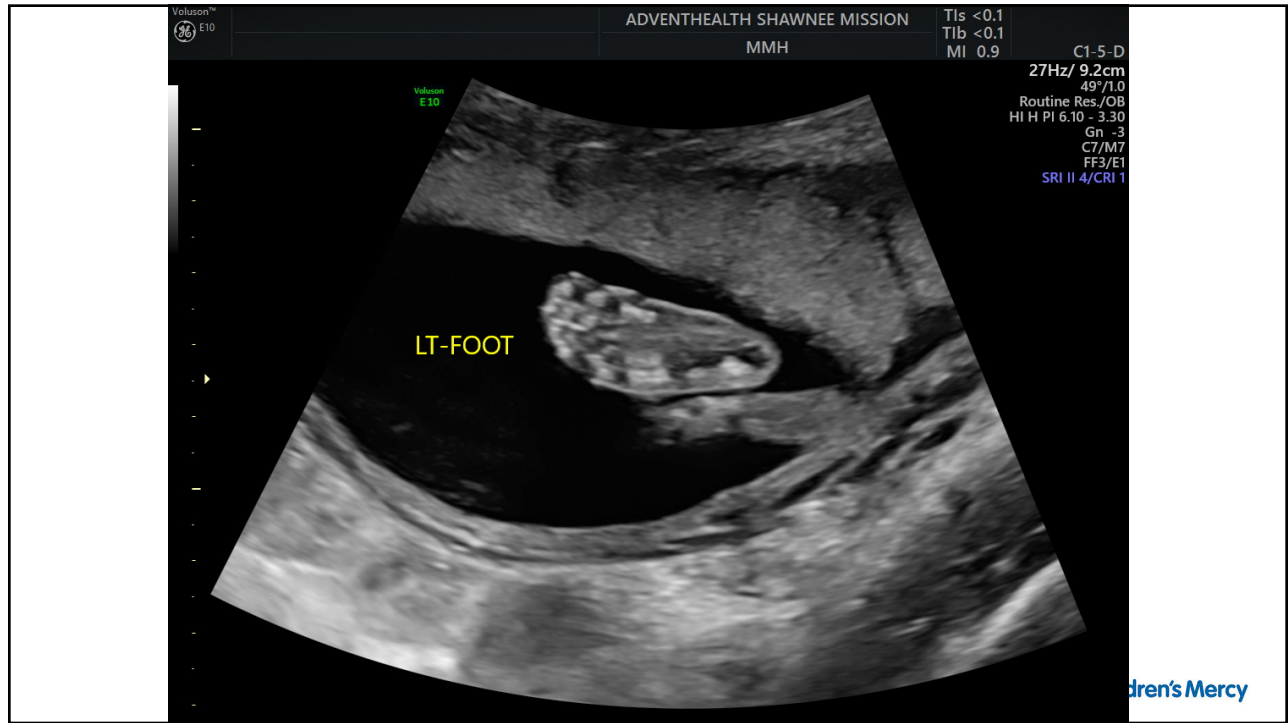
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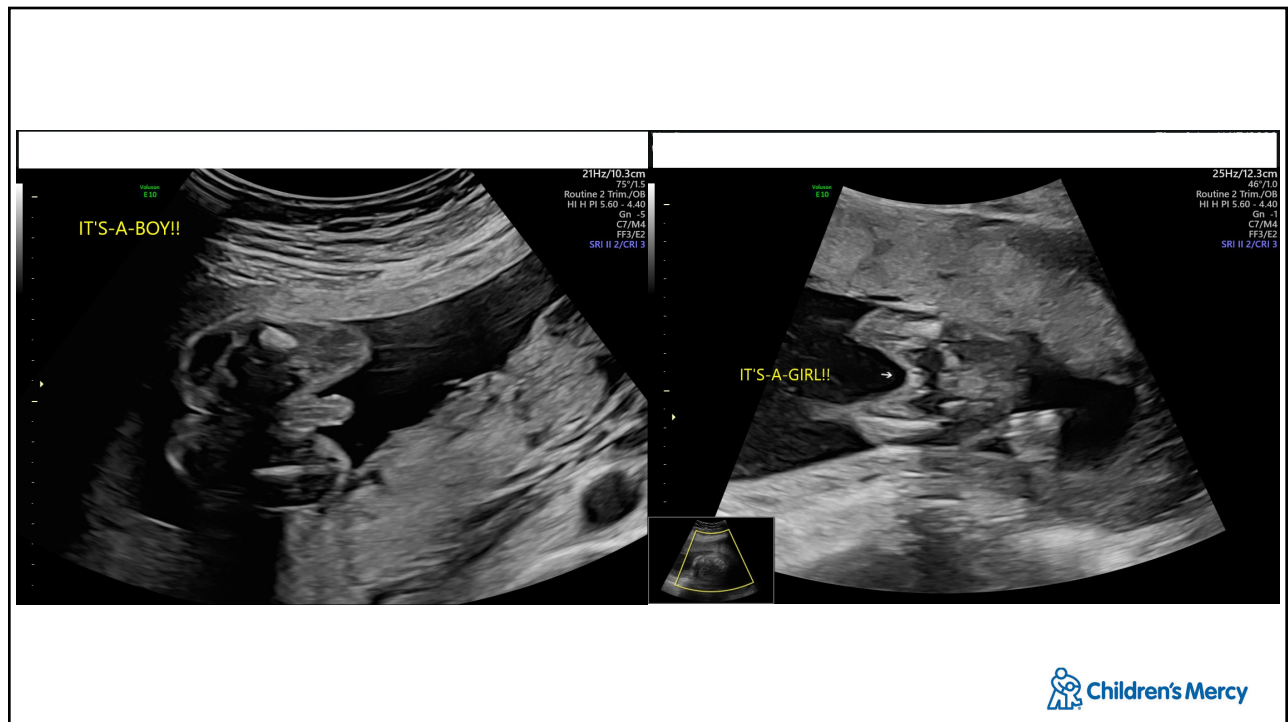
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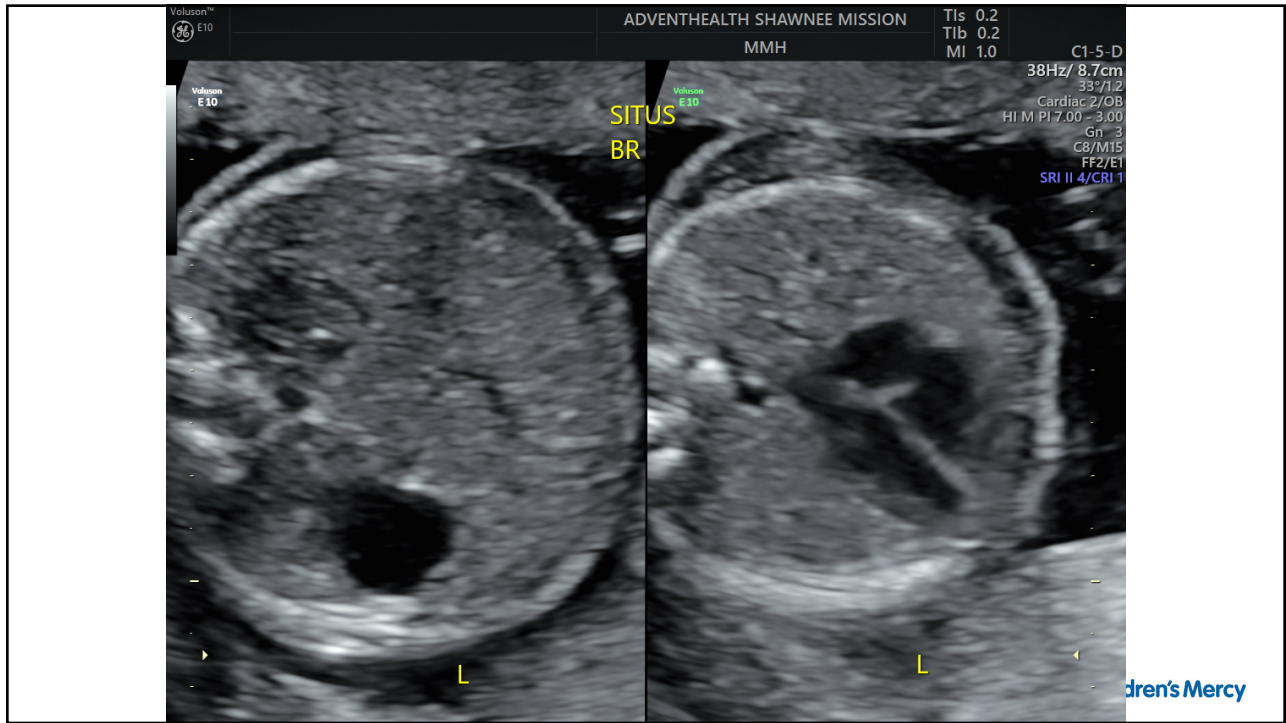
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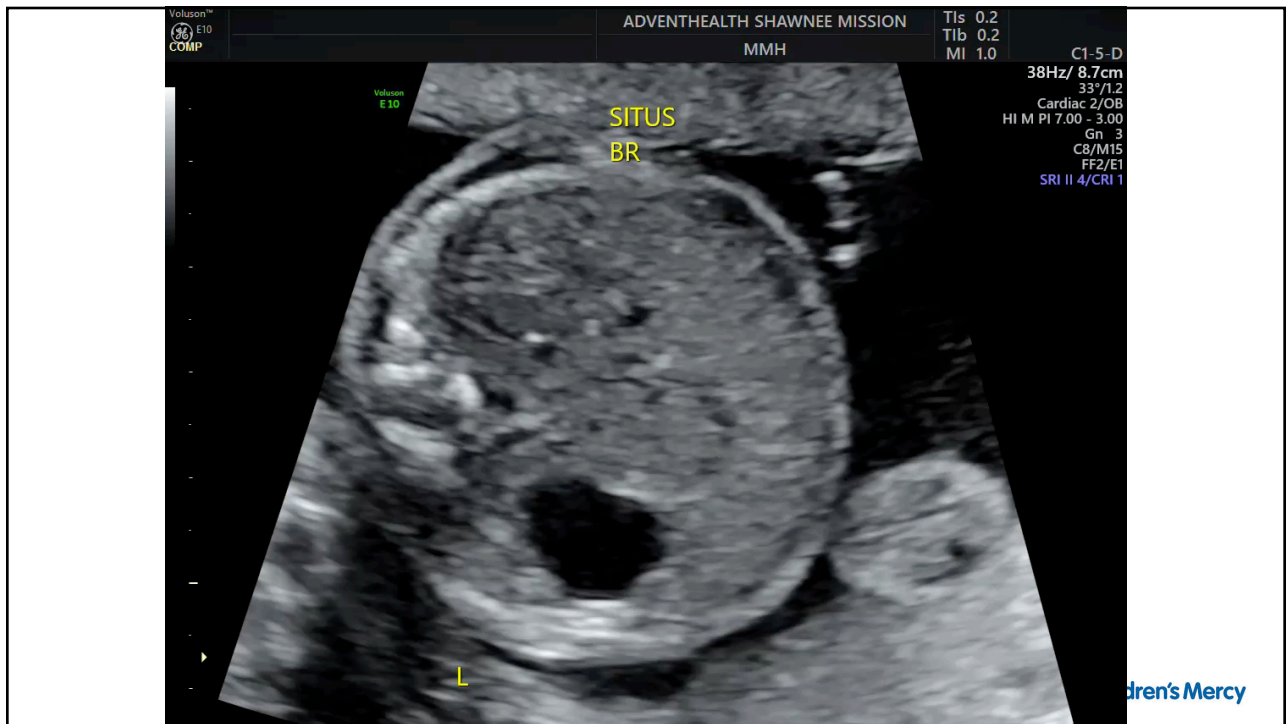
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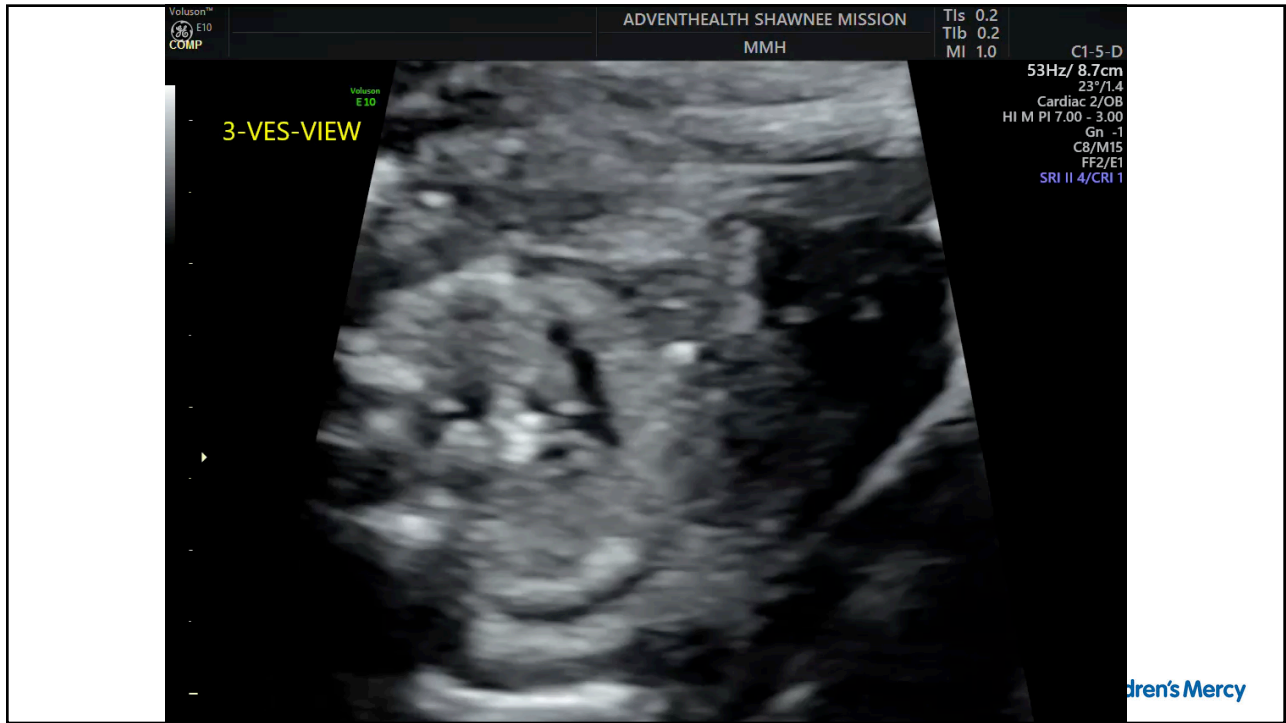
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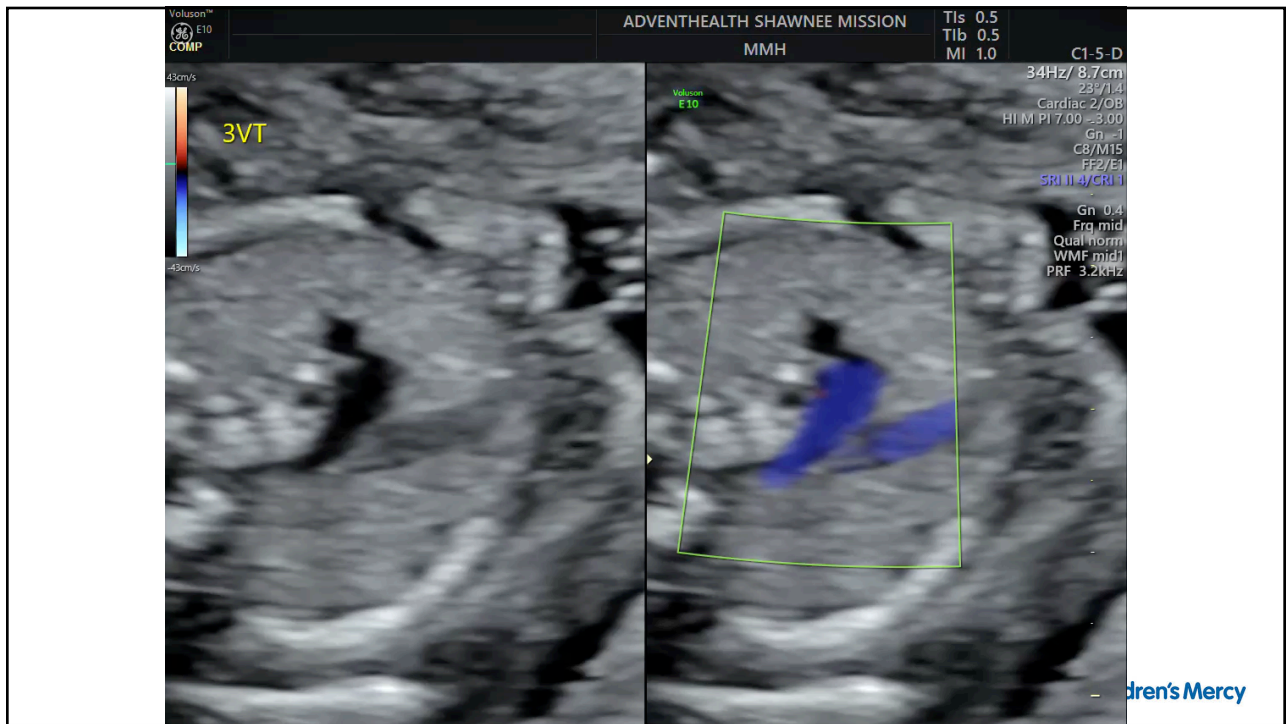
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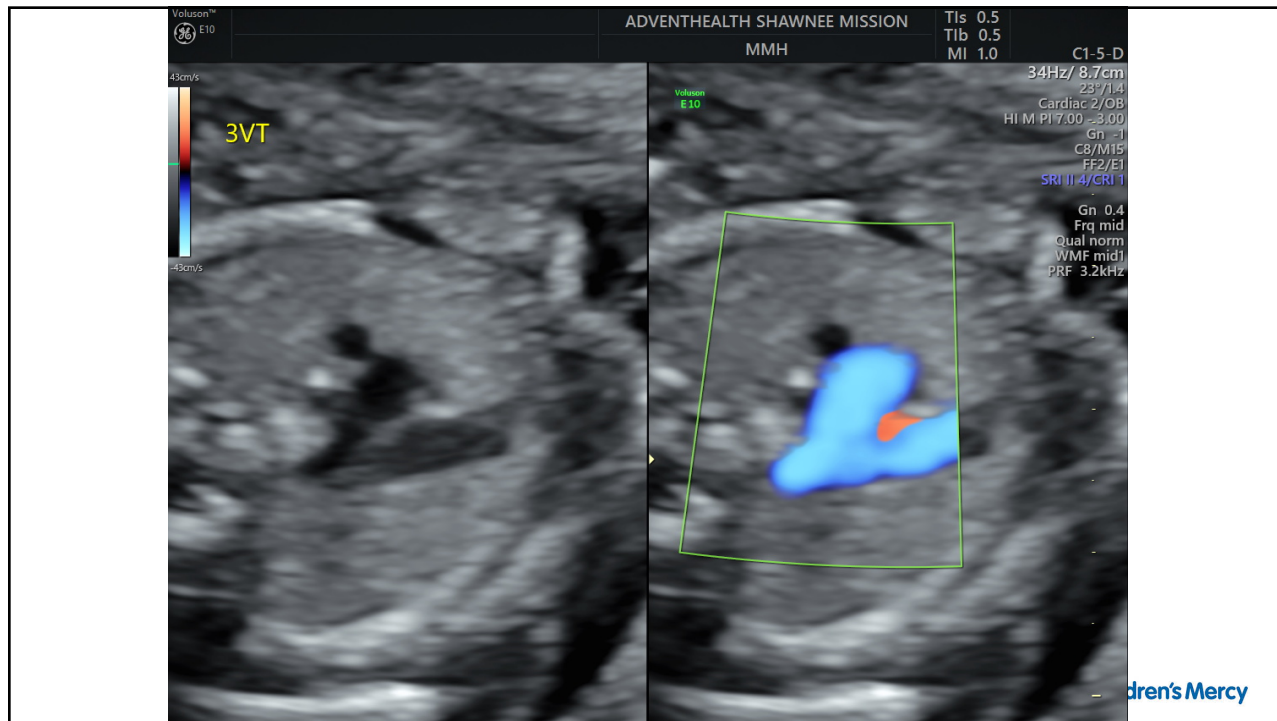
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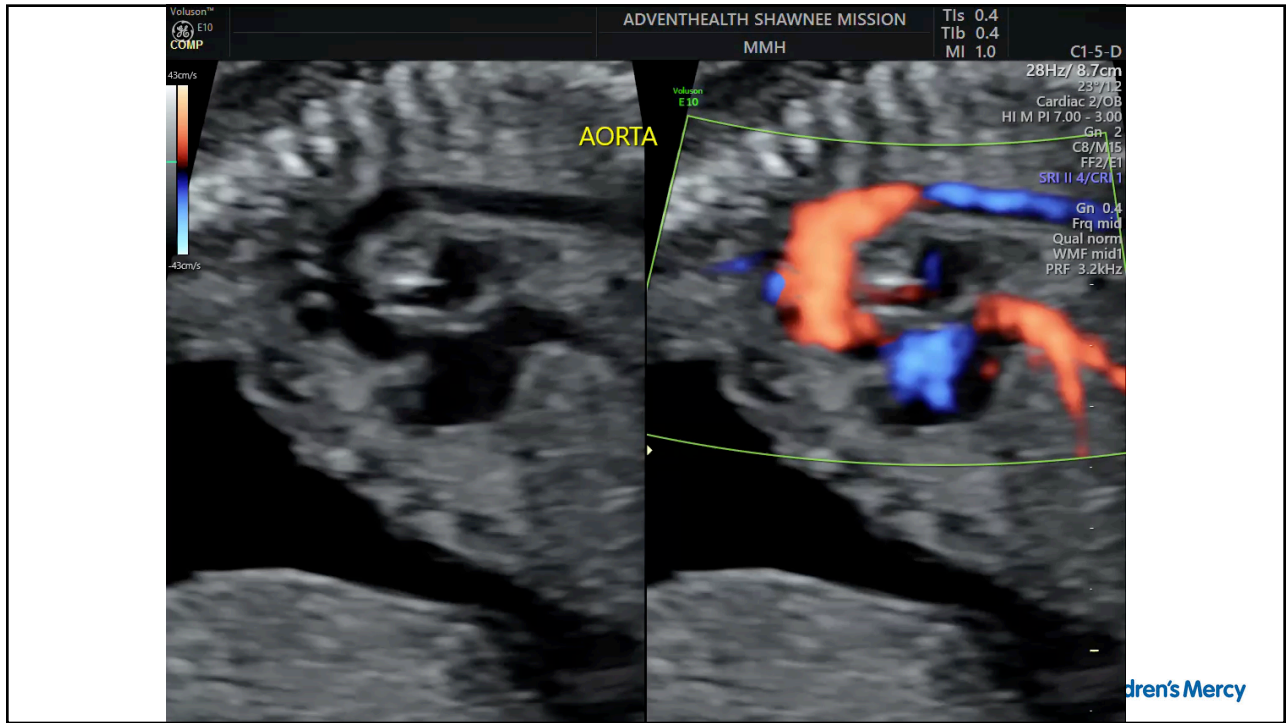
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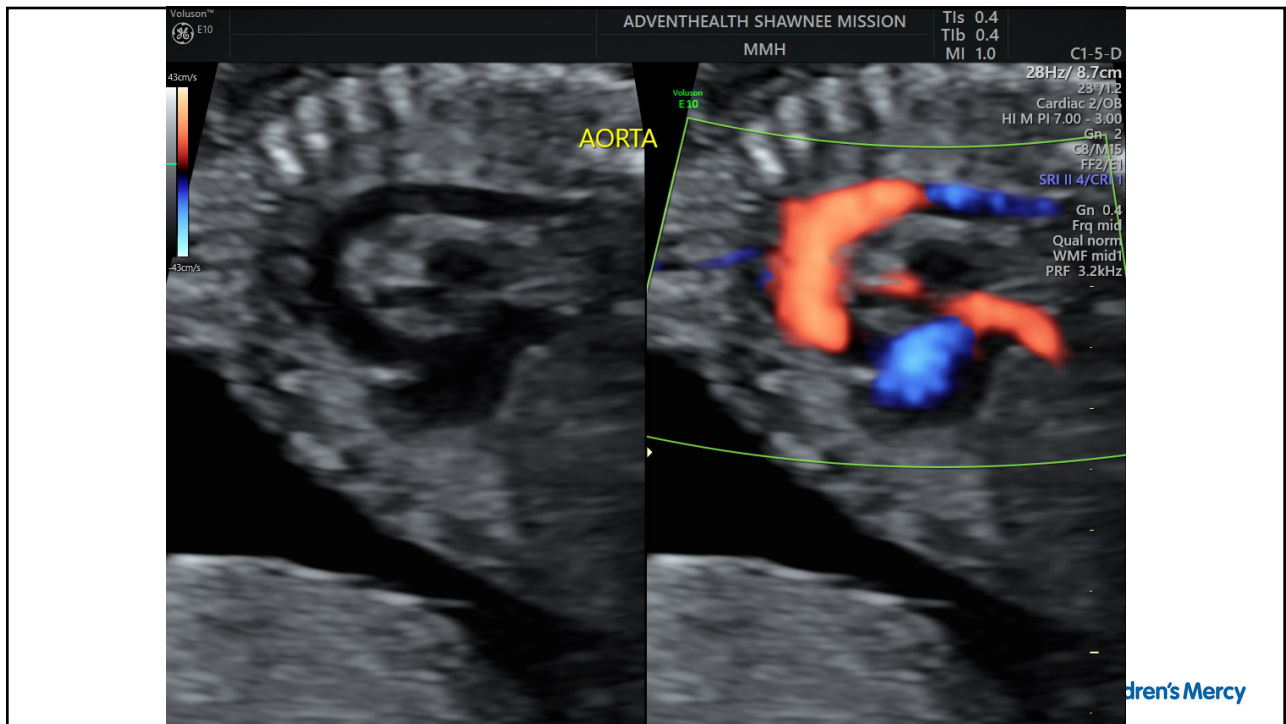
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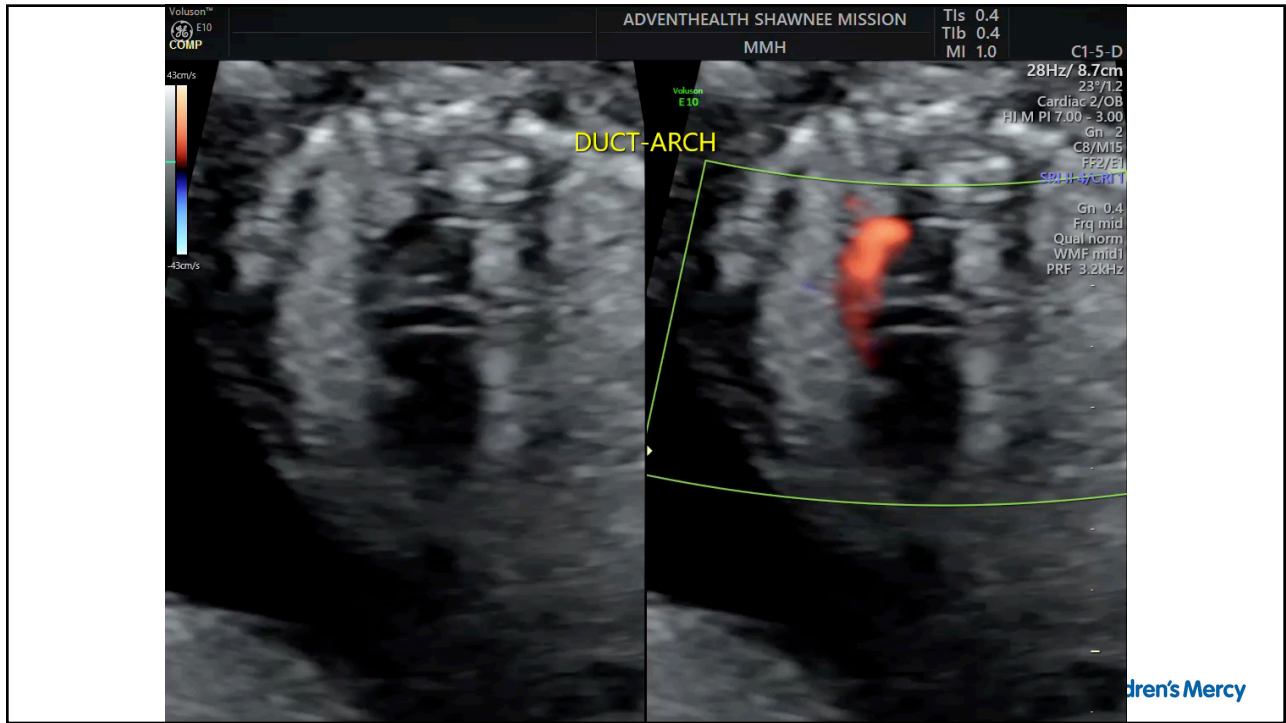
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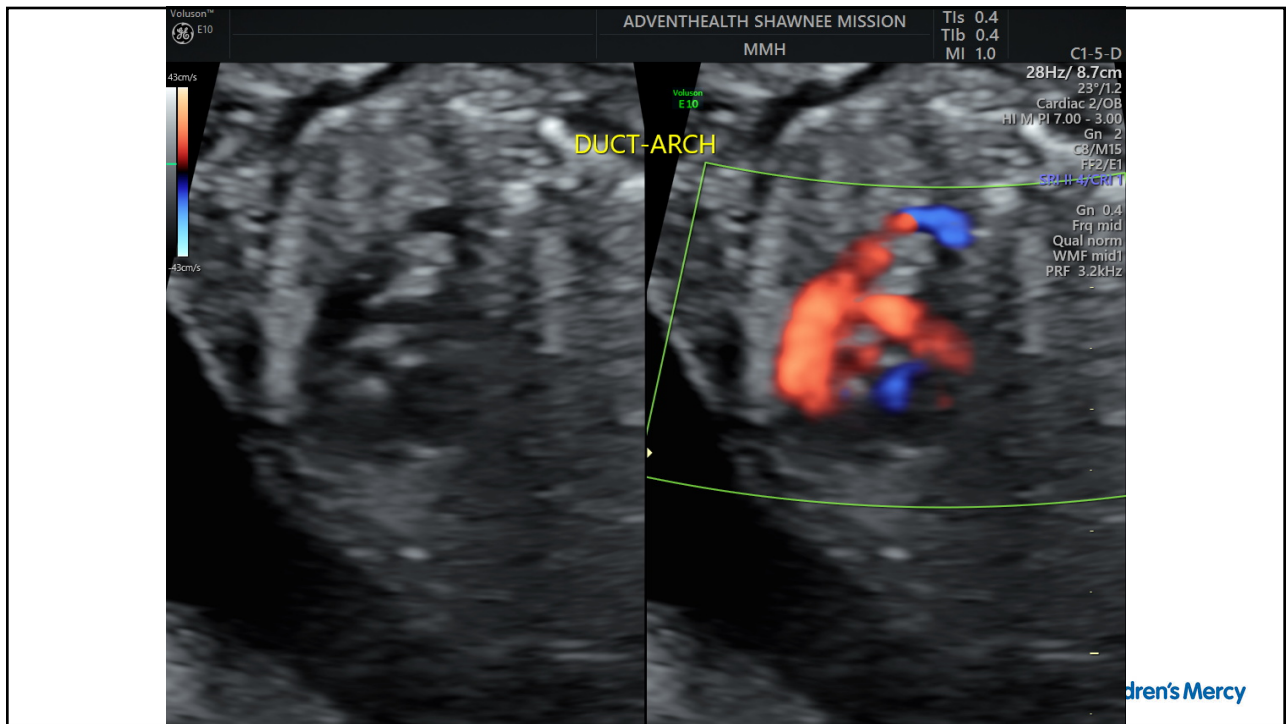
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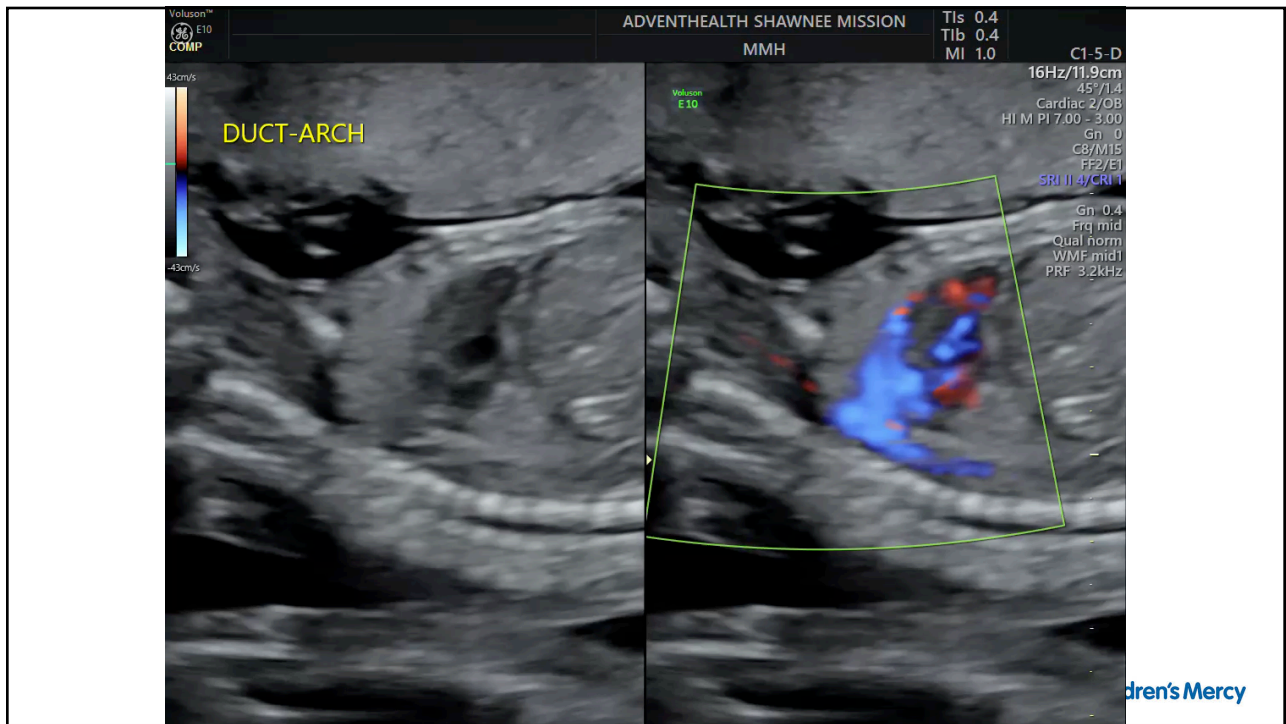
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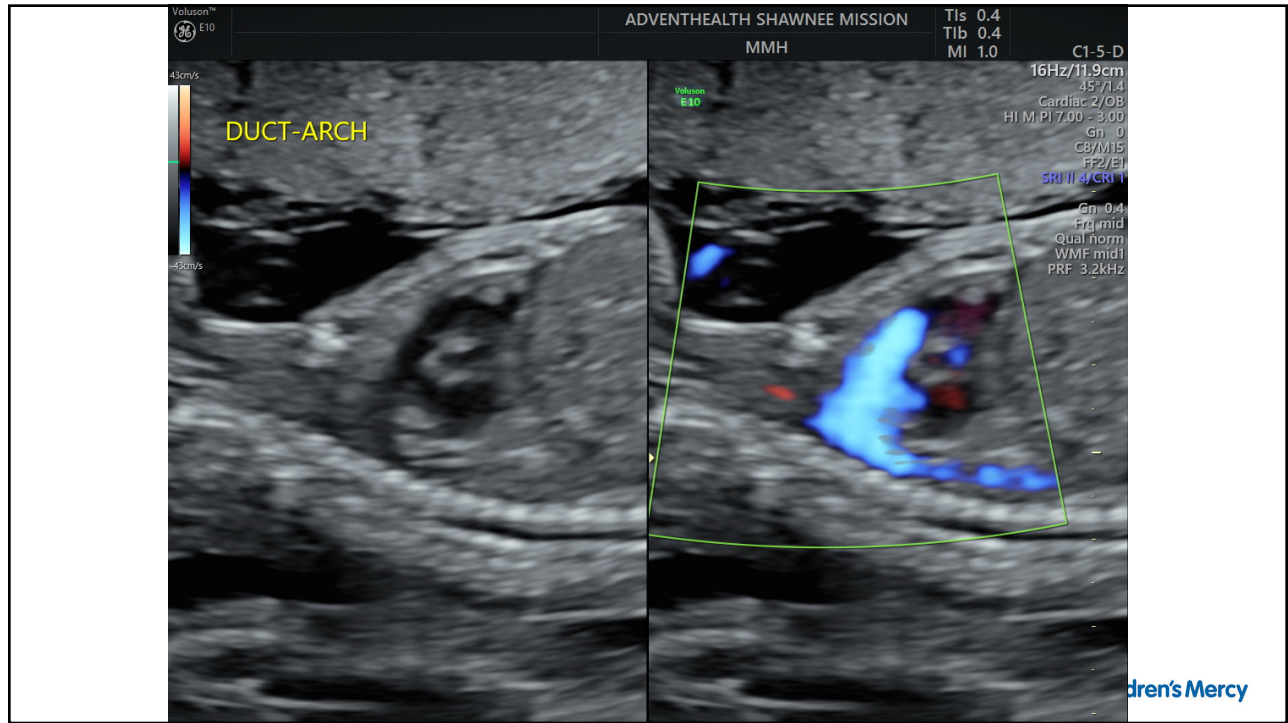
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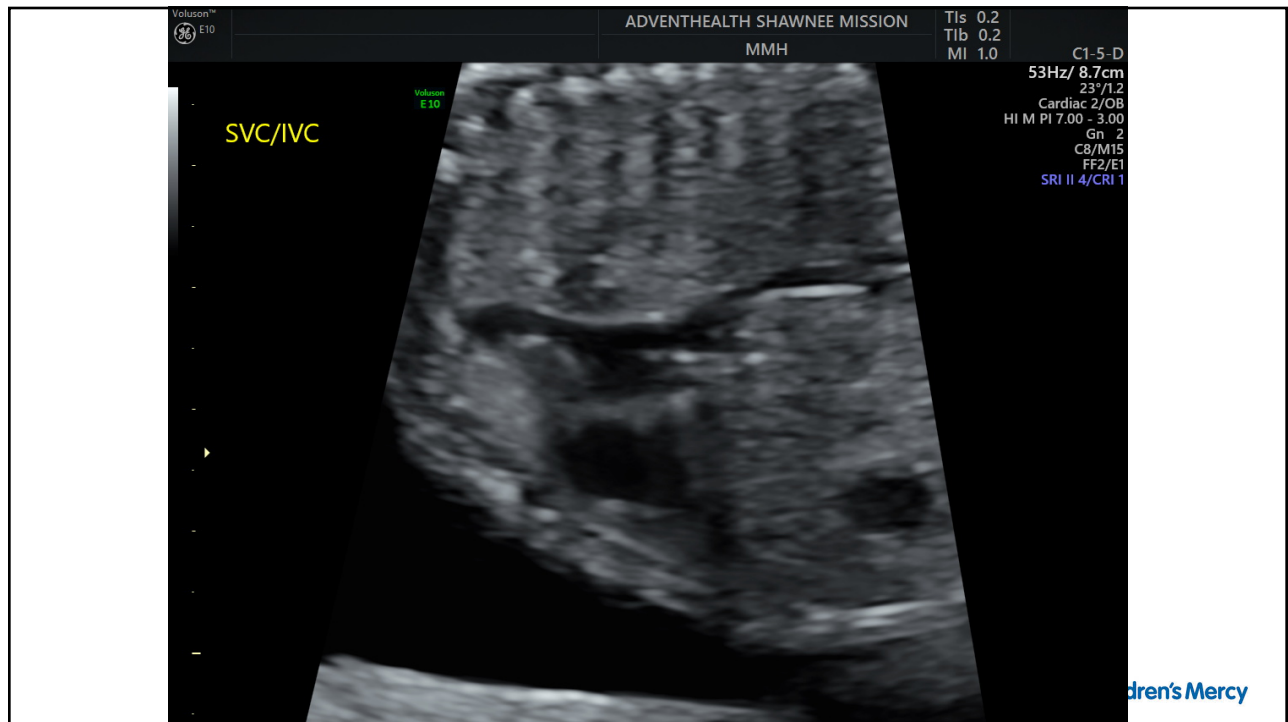
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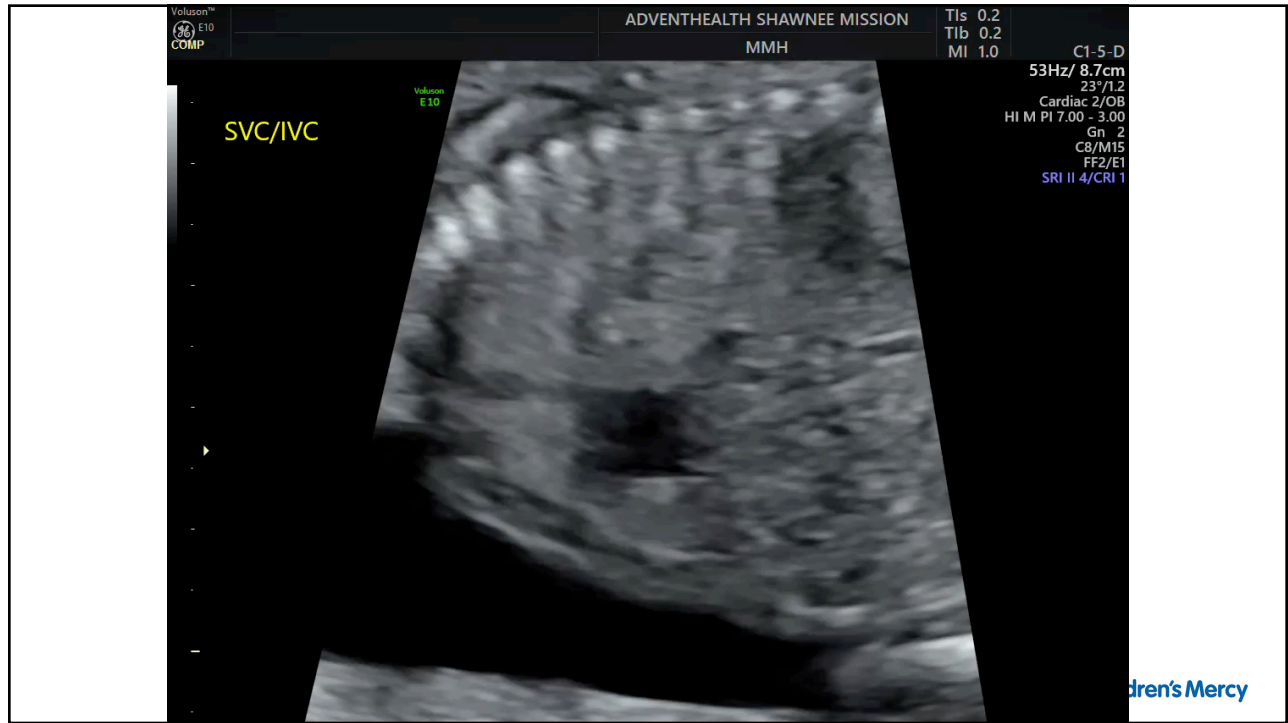
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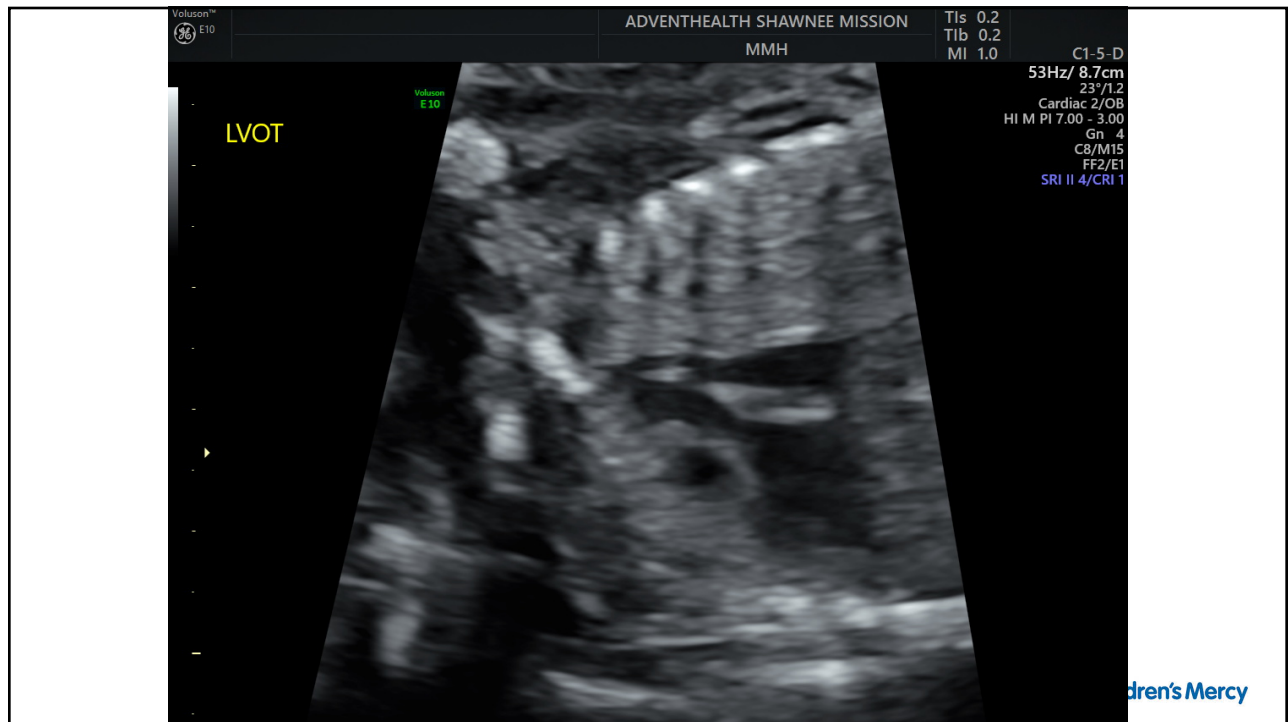
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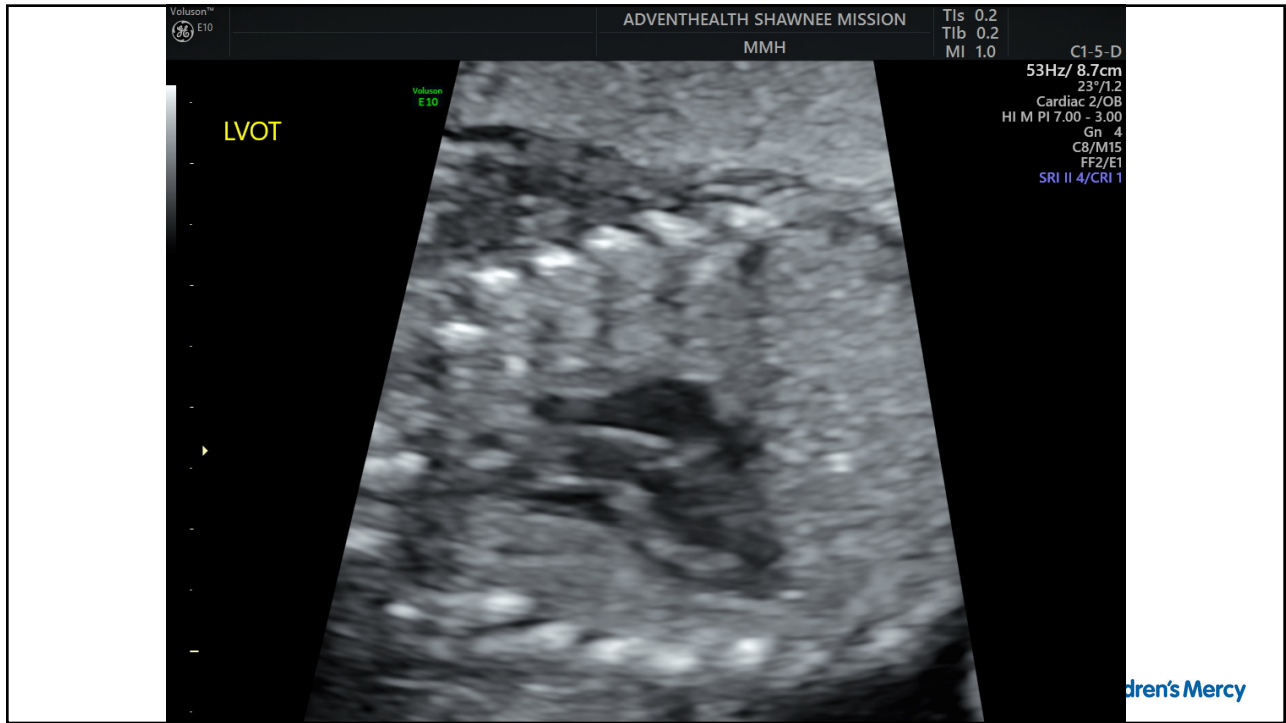
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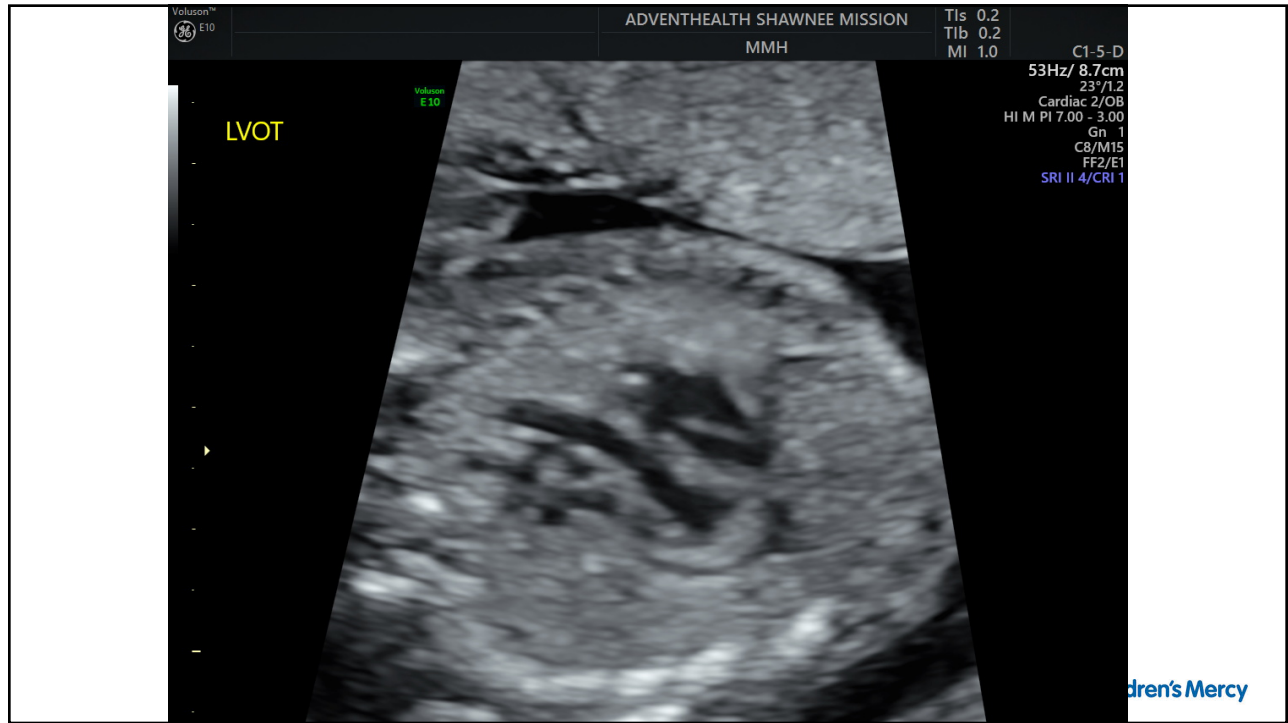
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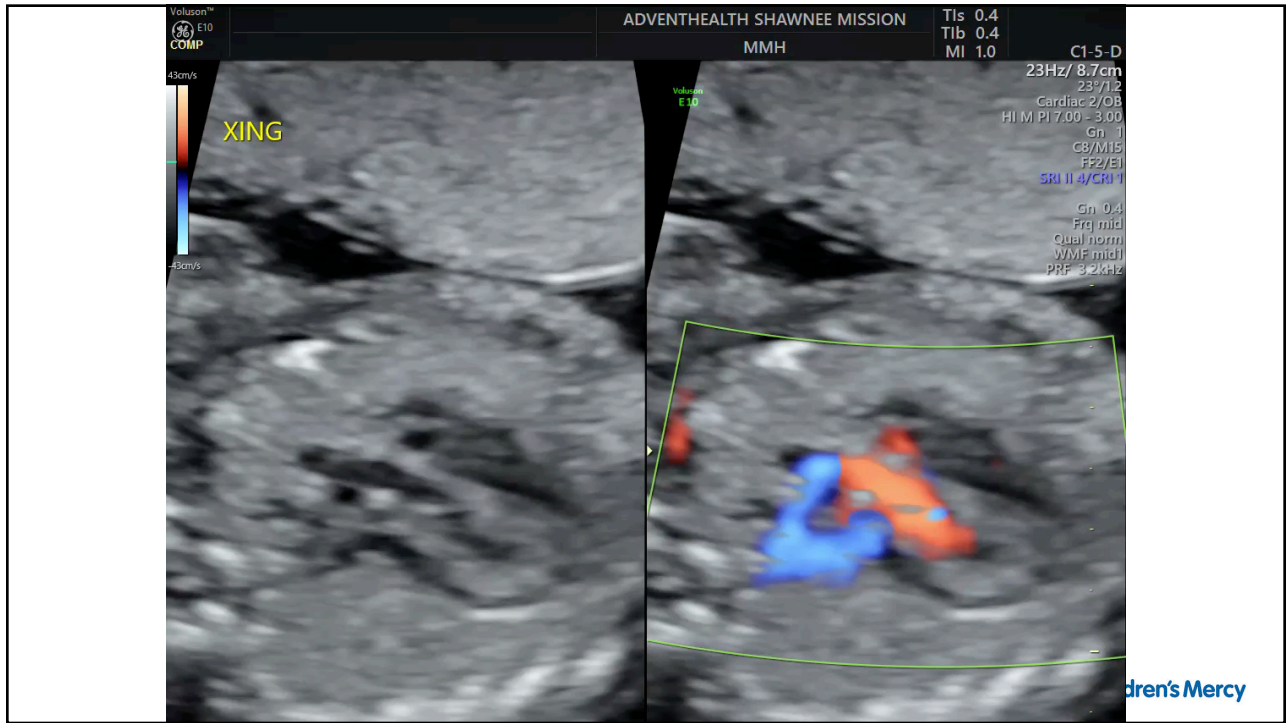
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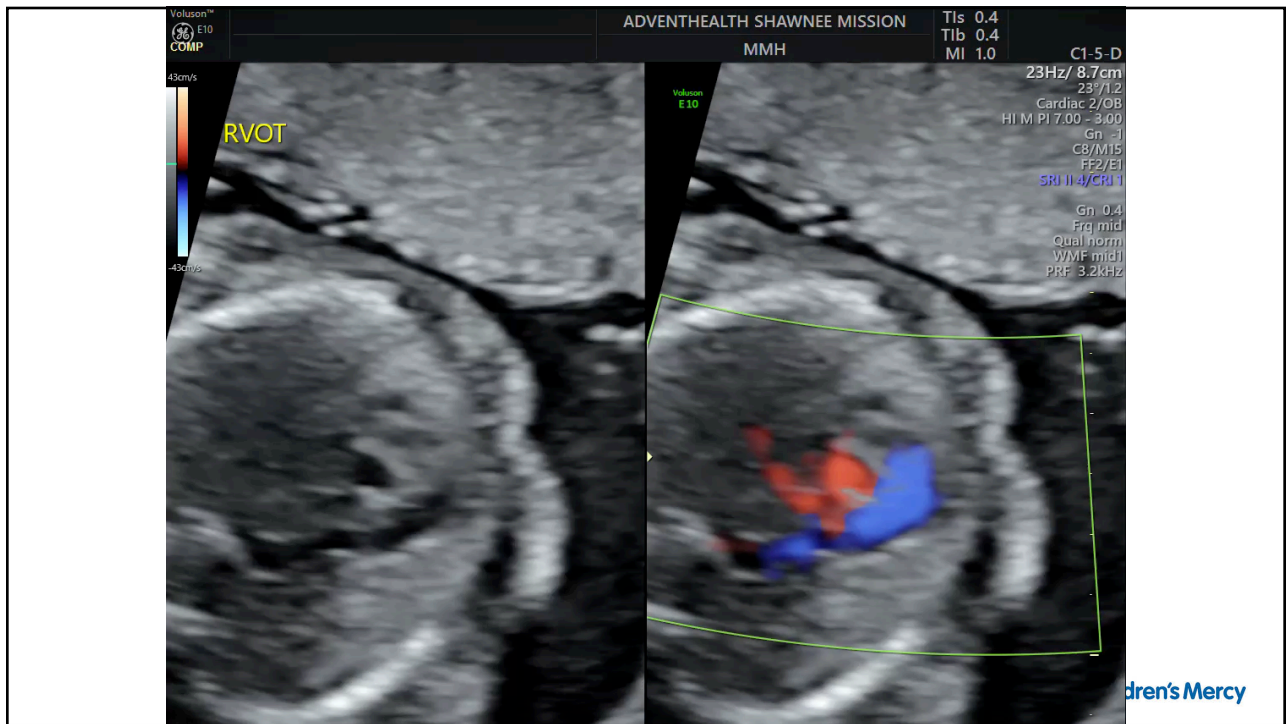
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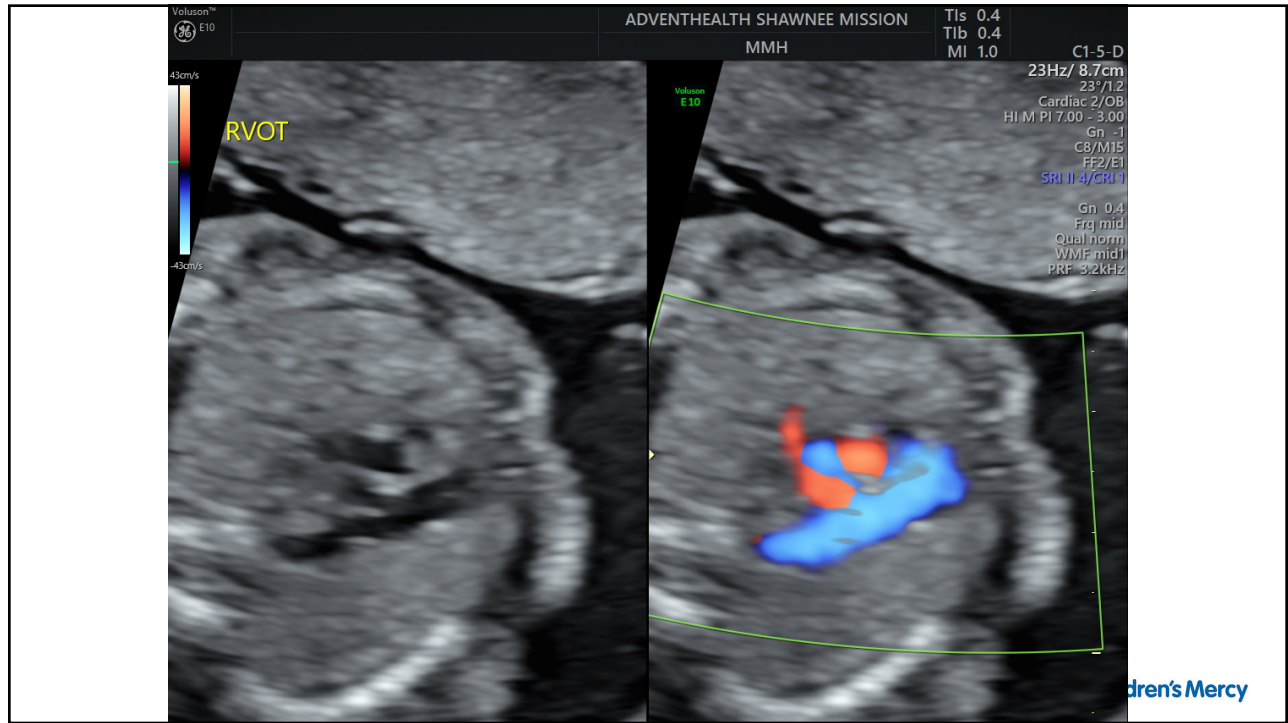
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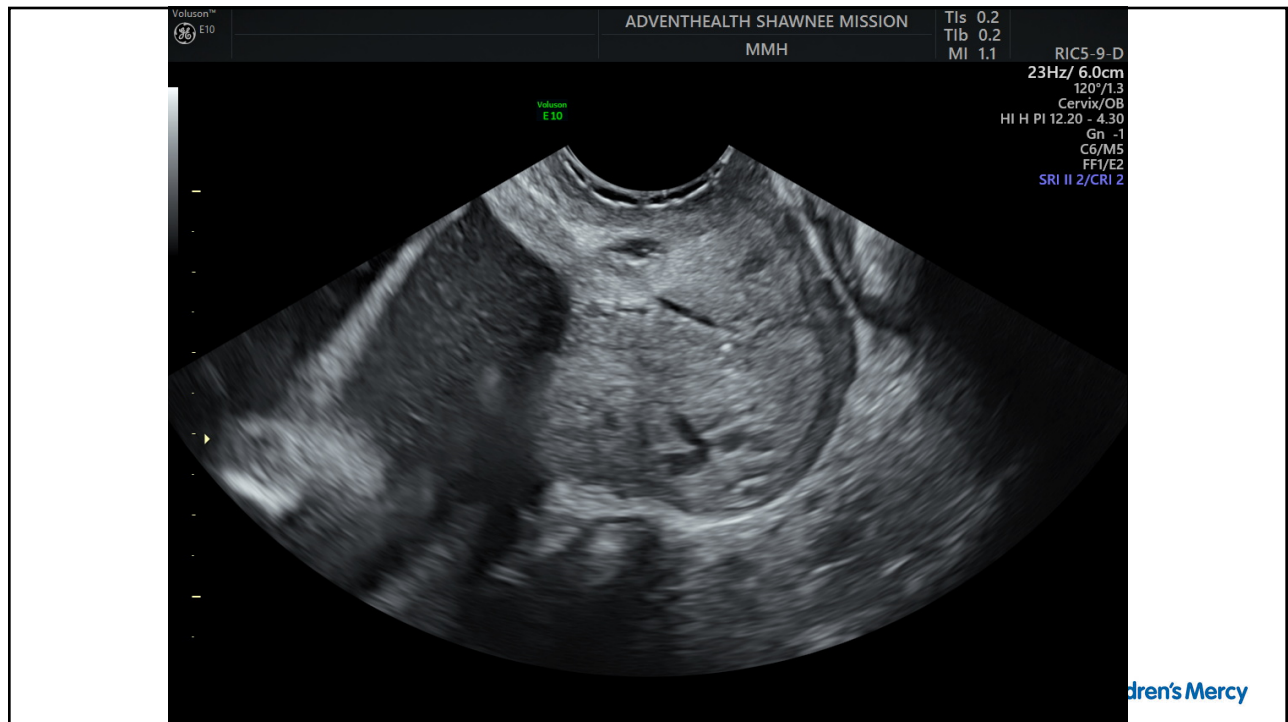
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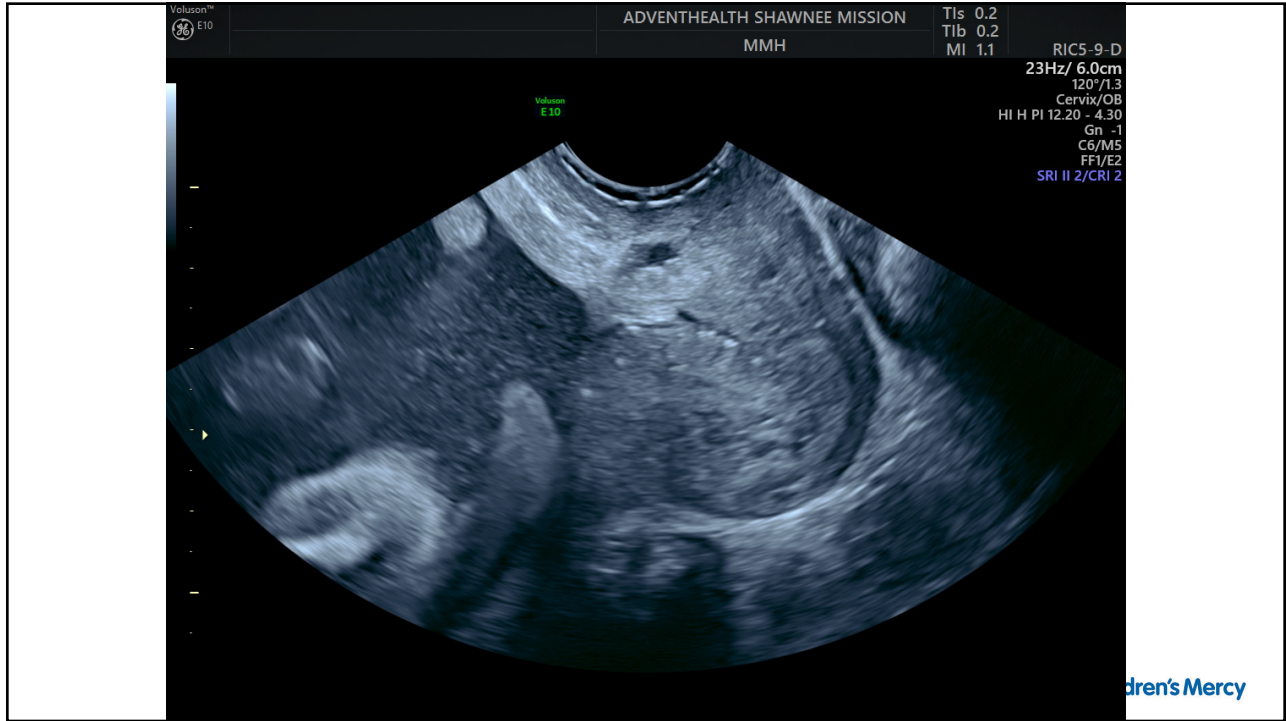
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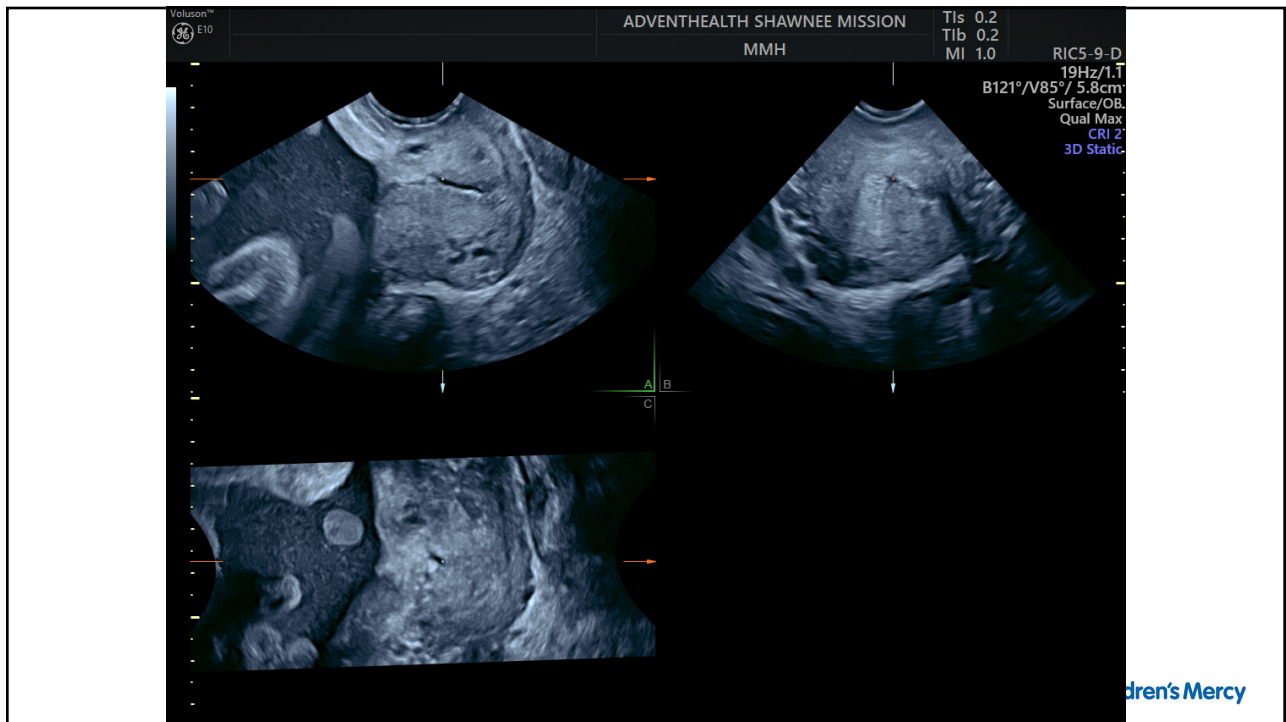
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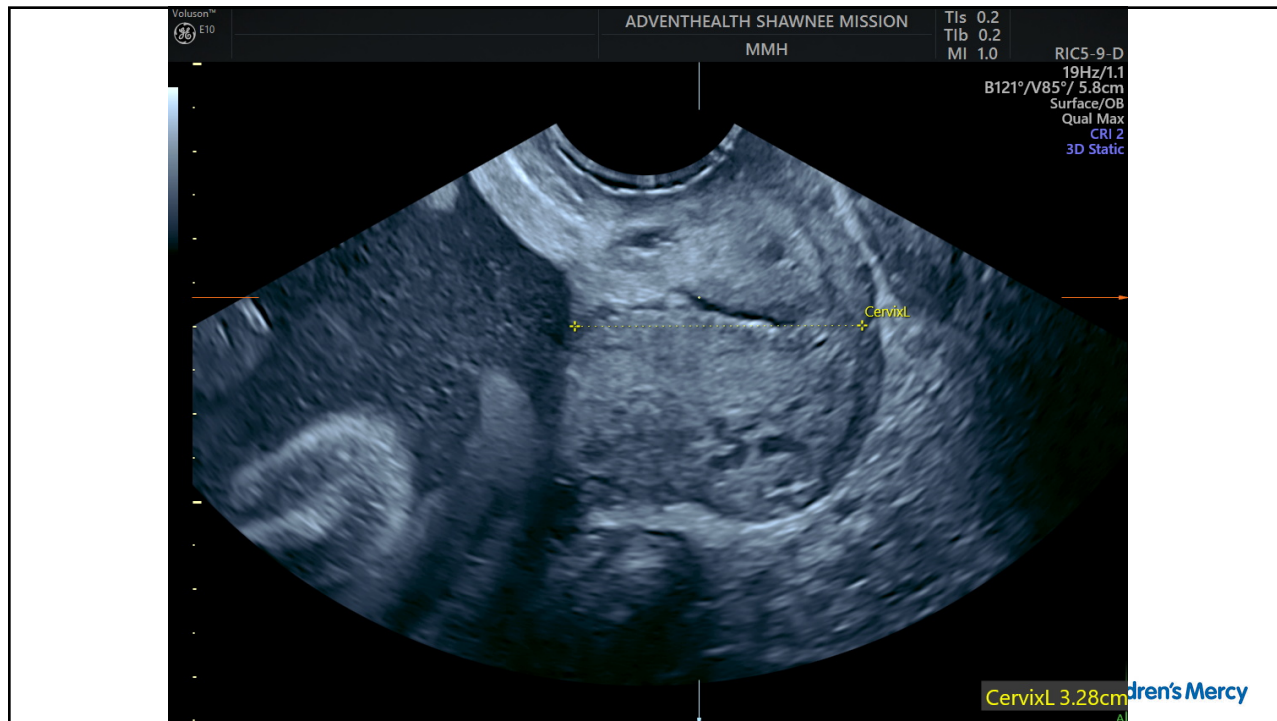
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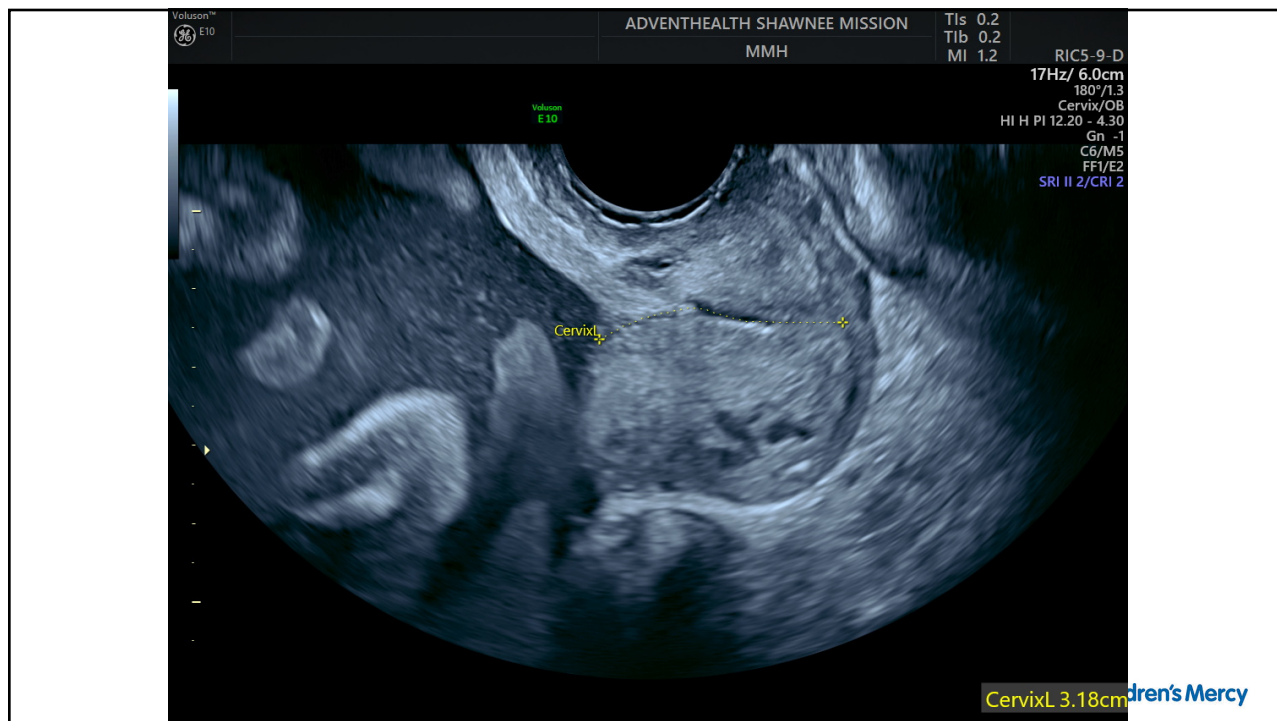
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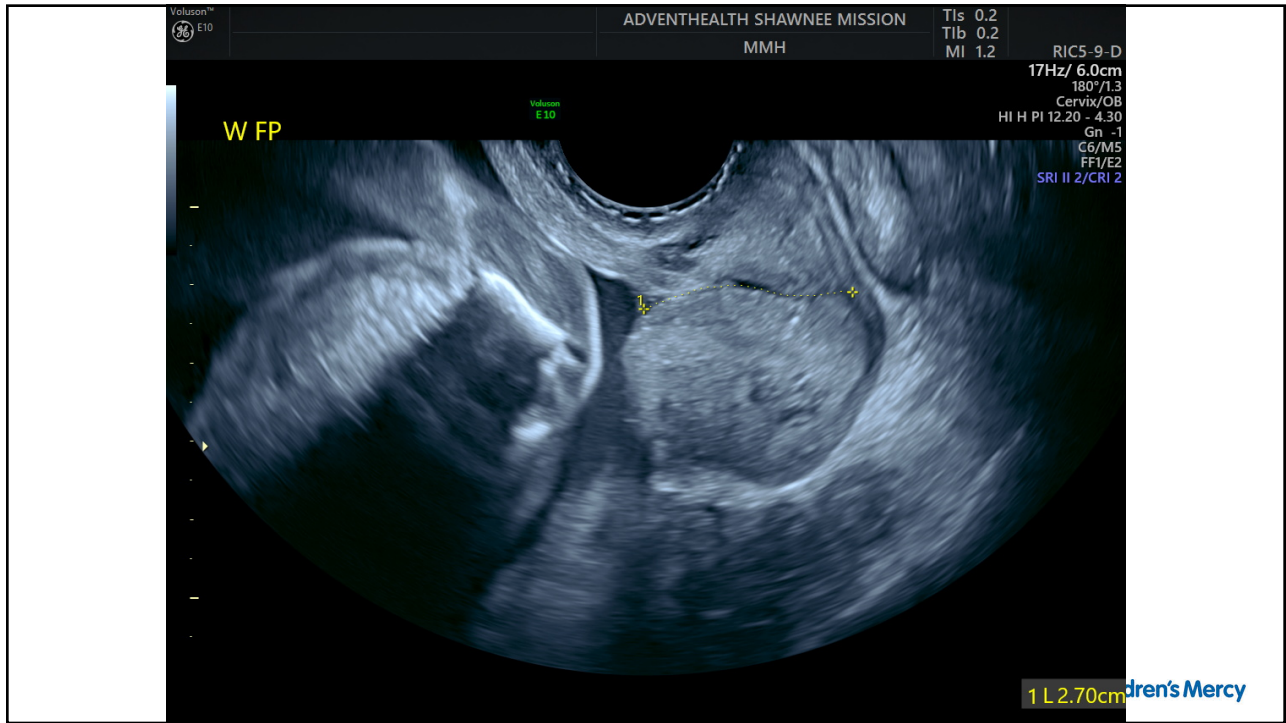
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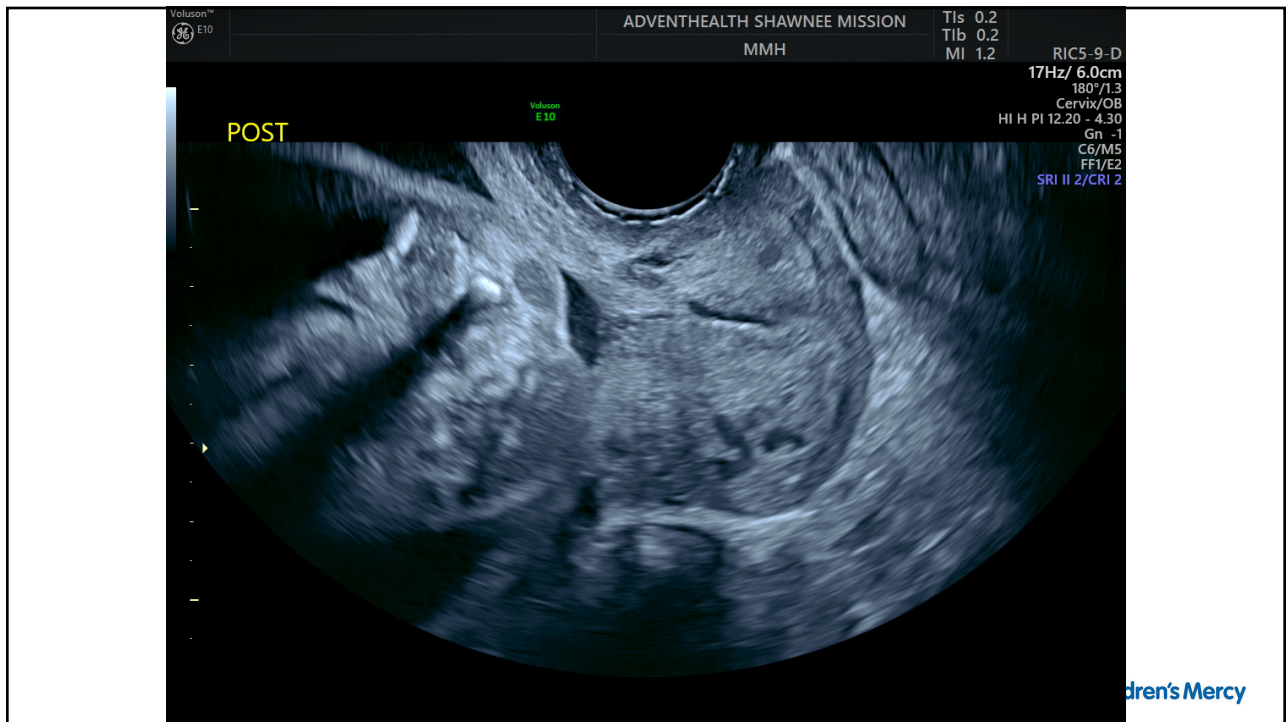
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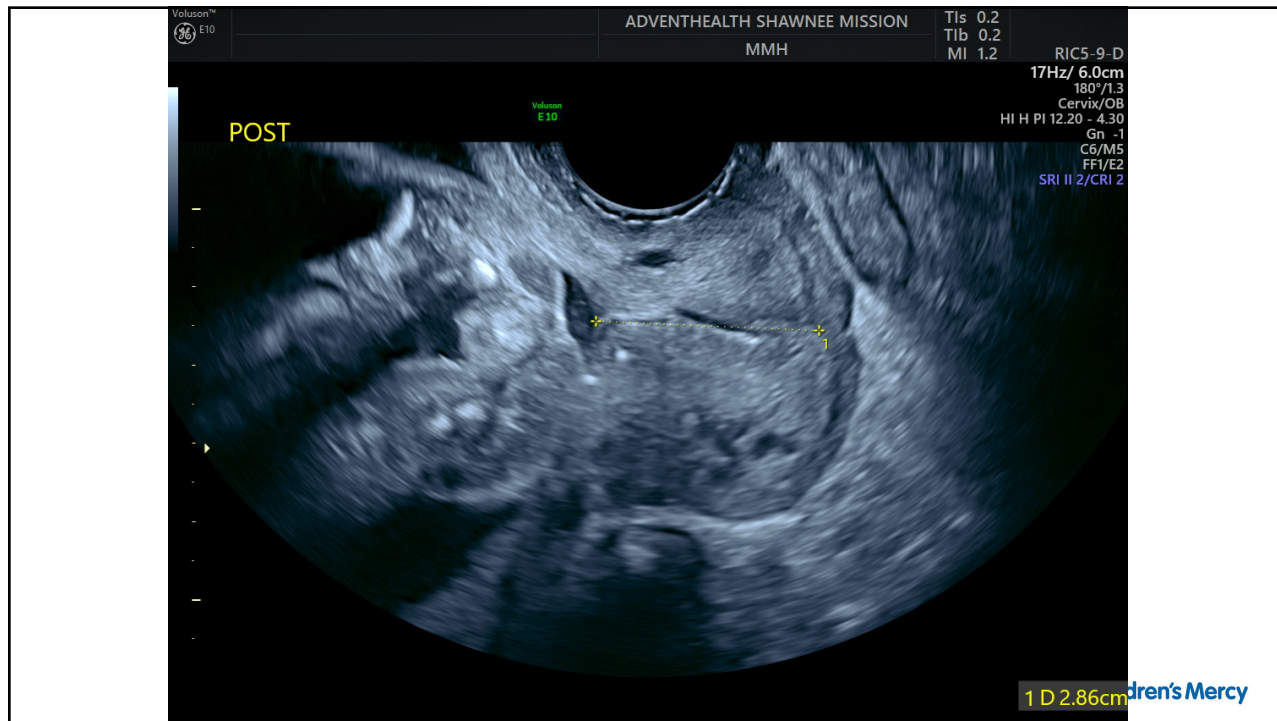
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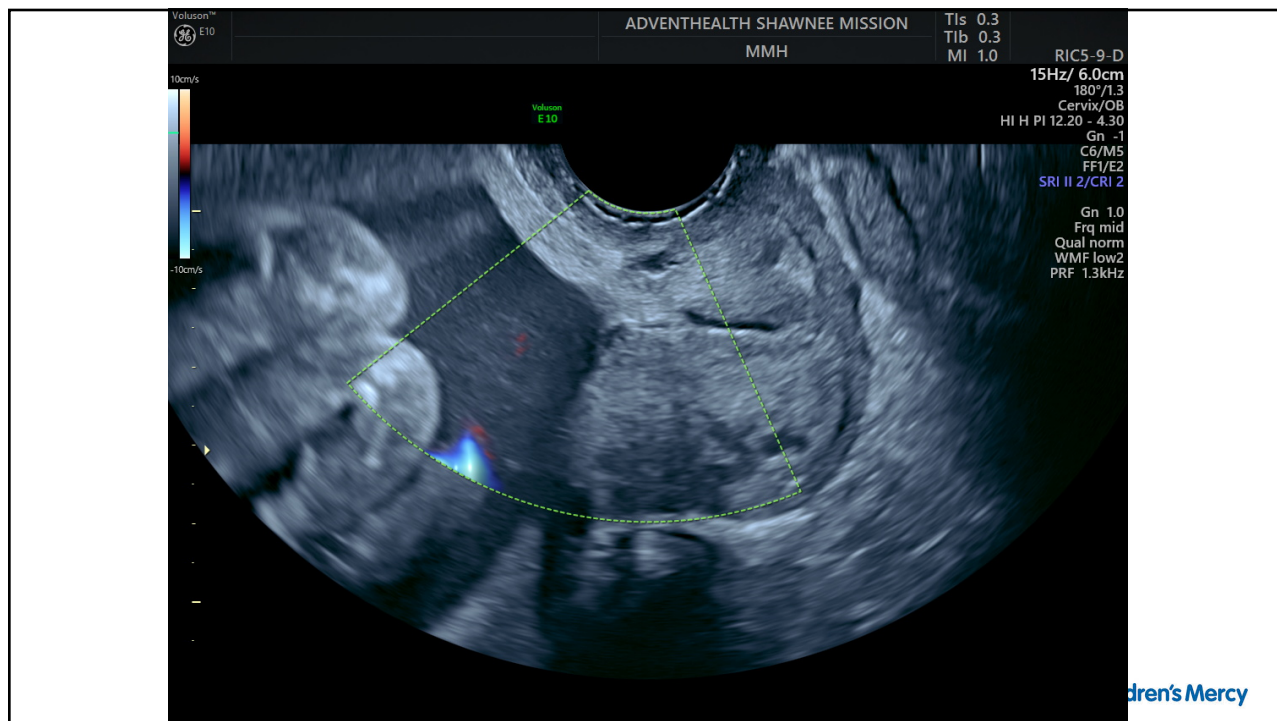
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OBSTETRICS REPORT 1 of 2 visit(s) Date: [REDACTED]

AdventHealth Shawnee Mission
9100 West 74th Street
Shawnee Mission, KS 66204
Tel: 913-676-2694 Fax: 913-676-6859

OBSTETRICS REPORT Signed Final [REDACTED]

Patient Info
ID #: [REDACTED] Name: [REDACTED] D.O.B.: [REDACTED] (M/F) Date: [REDACTED]

Performed By
Performed By: Margaret Harry RDMS, RDCS
Attending: Devika Maulik MD
Exam Location: Advent Health Shawnee Mission
Maternal Fetal Specialists
Visit Type: MFM

Referred By: [REDACTED]
Ref Address: [REDACTED]

Service(s) Provided

US Detailed Anatomic Exam	Code: 76811
US Transvaginal Pregnant Uterus	Code: 76817

Indications

Screen for malformations
Rheumatoid arthritis
History of cesarean delivery x1
Advanced maternal age

Vital Signs

Weight (lb)	151	Height	5'4"	BMI	25.92	Pulse	84	BP	102/68
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Fetal Evaluation

Number Of Fetuses:	1	Presentation:	Variable
Preg. Location:	Intrauterine	Placenta:	Anterior
Cardiac Activity:	Observed	P. Cord Insertion:	Normal

Amniotic Fluid

Amniotic F.V.:	Normal	Largest Pocket:	6.17 cm
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Biometry

BPD:	48.1 mm	G. Age:	20w 4d	CI (BPO/OFD):	79.6 %	70 - 86
OFD:	60.4 mm			FLHC:	19.6 %	19.8 - 19.8
HC:	173.1 mm	G. Age:	19w 6d	HCAC:	1.13	1.09 - 1.39
AC:	153.4 mm	G. Age:	20w 4d	FLBPD:	70.7 %	
FL:	34 mm	G. Age:	20w 5d	FLUAC:	22.2 %	20 - 24
HUM:	31.7 mm	G. Age:	20w 4d			
CER:	21 mm	G. Age:	20w 0d			
NFT:	2.82 mm					
NB:	6.45 mm	> 1 MoM				
LV:	6.02 mm					
CM:	5.45 mm					
ULN:	29.2 mm	G. Age:	21w 0d			
TIB:	29.8 mm	G. Age:	20w 4d			
RAD:	27.8 mm	G. Age:	20w 3d			

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Biometry - Continued

FI: 29.2 mm G. Age: 20w 3d
Estimated FW: 360 gm 0 lb 13 oz

OB History

Gravidity: 3 Term: 2 Prem: SAB: TOP: Ectopic: Living: 2

Gestational Age

LMP: 20w 0d Date: [REDACTED] EDD: [REDACTED]
US Today: 20w 3d EDD: [REDACTED]
Best: 20w 0d Determined By: LMP

Targeted Anatomy

Central Nervous System

Calvarium/Cranial:	Normal appearance	Lateral Ventricles:	Normal appearance	Corpus Callosum:	Normal appearance
Intracranial Anat:	Normal appearance	Choroid Plexus:	Normal appearance	Midline Fax:	Normal appearance
Cavum:	Normal appearance	Cereb/Vernis:	Normal appearance	3rd Ventricle:	Normal appearance
Parenchyma:	Normal appearance	Cisterna Magna:	Normal appearance	4th Ventricle:	Normal appearance

Spine

Cervical:	Normal appearance	Lumbar:	Normal appearance	Shape/Curvature:	Normal appearance
Thoracic:	Normal appearance	Sacral:	Normal appearance		

Head/Neck

Face:	Normal appearance	Nasal Bone:	Present	Mandible:	Normal appearance
Lips:	Normal appearance	Palate:	Normal appearance	Maxilla:	Normal appearance
Neck:	Normal appearance	Profile:	Normal appearance		
Nuchal Fold:	Normal appearance	Orbits/Eyes:	Normal appearance		

Thorax

Thoracic Contour:	Normal appearance	Rt Outflow Tract:	Normal appearance	Cardiac Axis:	Normal appearance
Lungs:	Normal appearance	Lt Outflow Tract:	Normal appearance	Diaphragm:	Normal appearance
4 Chamber View:	Normal appearance	Aortic Arch:	Normal appearance	3 Vessel View:	Normal appearance
Cardiac Motion:	Normal appearance	Ductal Arch:	Normal appearance	IVC:	Normal appearance
Cardiac Rhythm:	Normal appearance	SVC:	Normal appearance	Crossing:	Normal appearance

Abdomen

Ventral Wall:	Normal appearance	Stomach:	Normal appearance	Bladder:	Normal appearance
Cord Insertion:	Normal appearance	Lt Kidney:	Normal appearance	Bowel:	Normal appearance
Silus:	Normal appearance	Rt Kidney:	Normal appearance		

Extremities

Lt Humerus:	Normal appearance	Lt Hand:	Normal appearance	Lt Lower Leg:	Normal appearance
Rt Humerus:	Normal appearance	Rt Hand:	Normal appearance	Rt Lower Leg:	Normal appearance
Lt Forearm:	Normal appearance	Lt Femur:	Normal appearance	Lt Foot:	Normal appearance
Rt Forearm:	Normal appearance	Rt Femur:	Normal appearance	Rt Foot:	Normal appearance

Other

Umbilical Cord:	Normal 3-vessel	Genitalia:	Normal appearance
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Cervix Uterus Adnexa

Cervix Length: 3.23 cm
Transvaginal - with fundal pressure, decreased to 2.8 cm

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Mercy

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Cervix Uterus Adnexa - Continued

Left Ovary
Visualized

Right Ovary
Visualized

Cul De Sac
No fluid noted

Adnexa
Both adnexa appeared unremarkable.

Comments

AFP: Negative (drawn 10/21/2020, MoM 0.62)
NIPS: Low risk (drawn 09/10/2020, Invitae)

Cervix appeared dynamic on today's ultrasound. I counseled the patient that it speaks to an increased risk of preterm birth if the cervical length is below 2.5 cm. In the meantime, I recommend serial cervical length next and thereafter every 1-2 weeks until 24 weeks. While there is no evidence about the efficacy of modified bedrest as an outpatient, I encouraged the patient to only do light activity (she does light weight work and does pick up her children). I also cautioned a lack of mobility increases the risk of clots, which she understood. I also suggested pelvic rest.

If the cervix is less than 2.5 cm at any time, I would recommend vaginal progesterone which multiple trials show a risk reduction of preterm birth by 44-62%. If she still shortens with progesterone, we may discuss a cerclage, though without a significant history prior, it is of questionable efficacy. The patient understood.

The patient has follow up in 1 week - Devika Maulik MD

Impression

Single, living, intrauterine gestation at 20w 0d.
Variable presentation.
Overall fetal biometry consistent with established gestational age.
Amniotic fluid assessment is normal.
No fetal abnormalities seen, within the limitations of ultrasound at this gestational age.

Transvaginal evaluation:
3.3 cm
Change with fundal pressure to 2.8 cm
No evidence of placenta previa or vasa previa.

Recommendations

Repeat limited ultrasound with transvaginal evaluation of the cervix in 1 week.
This appointment has been scheduled. If you choose to change this appointment in any way, please contact our office.

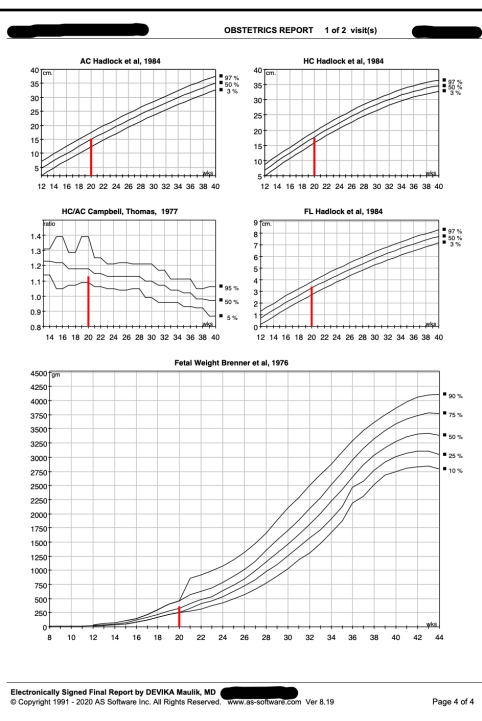
Thank you for sharing the care of Ms [REDACTED] with us. Please do not hesitate to contact us if you have any questions or concerns.

DEVIKA MAULIK, MD

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Mercy

References

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Contact Information

- M Margaret Harry
- mmharry@cmh.edu



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