Overview of OB measurement

Clinical Application Team

ALPINION MEDICAL SYSTEMS

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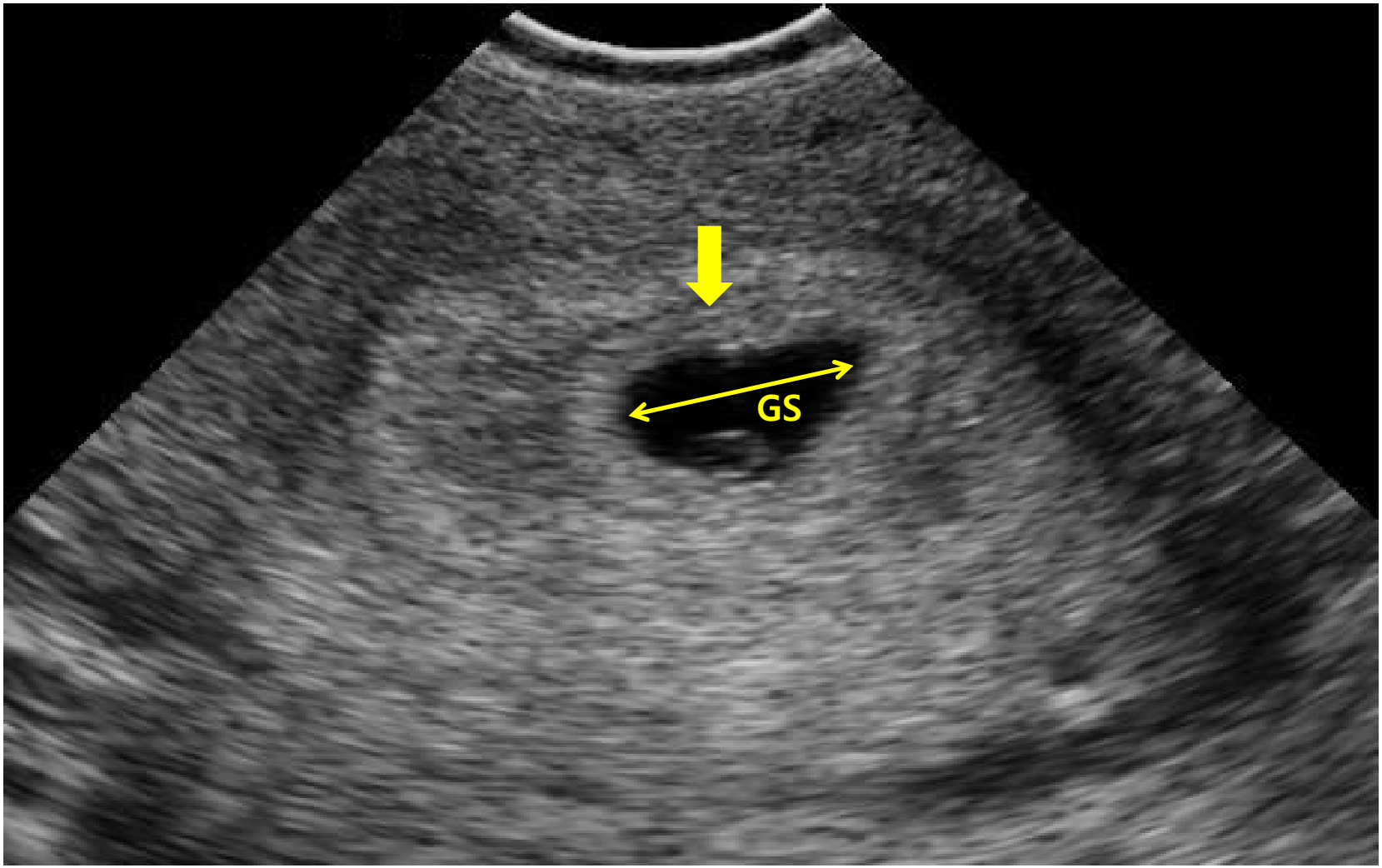
1st trimester

- Location of GS
- Identification of embryo or fetus
- Fetal number
- Fetal cardiac activity
- CRL (Crown – rump length)
- Uterus and adnexae structure

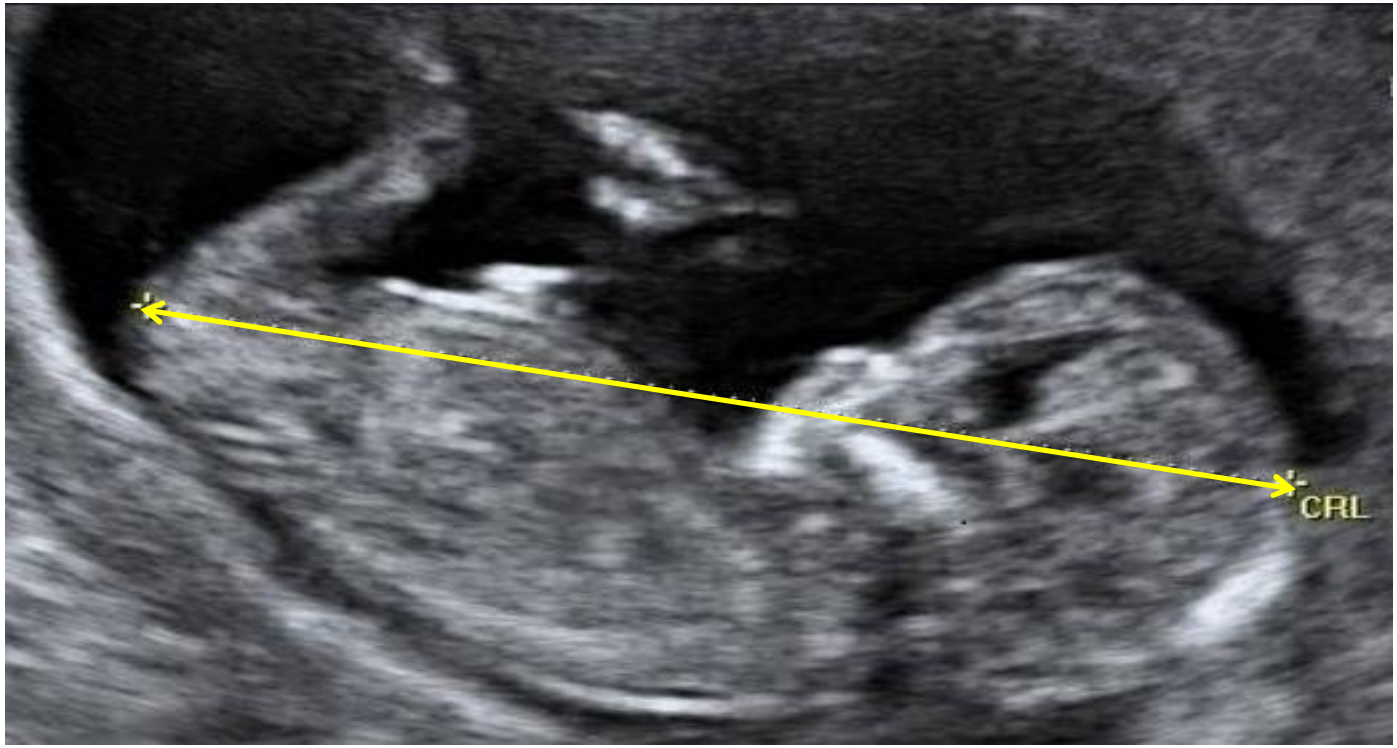
1st trimester

- **Gestation sac – 4w**
- **Yolk sac – 5w**
- **Embryo – 6w**
- **Heartbeat – 6^{+3} w ~ (120~160bpm)**
- **CRL – 8~12w**
- **NT – 11~13^{+6}w + nasal bone**

GS



Crown-Rump Length



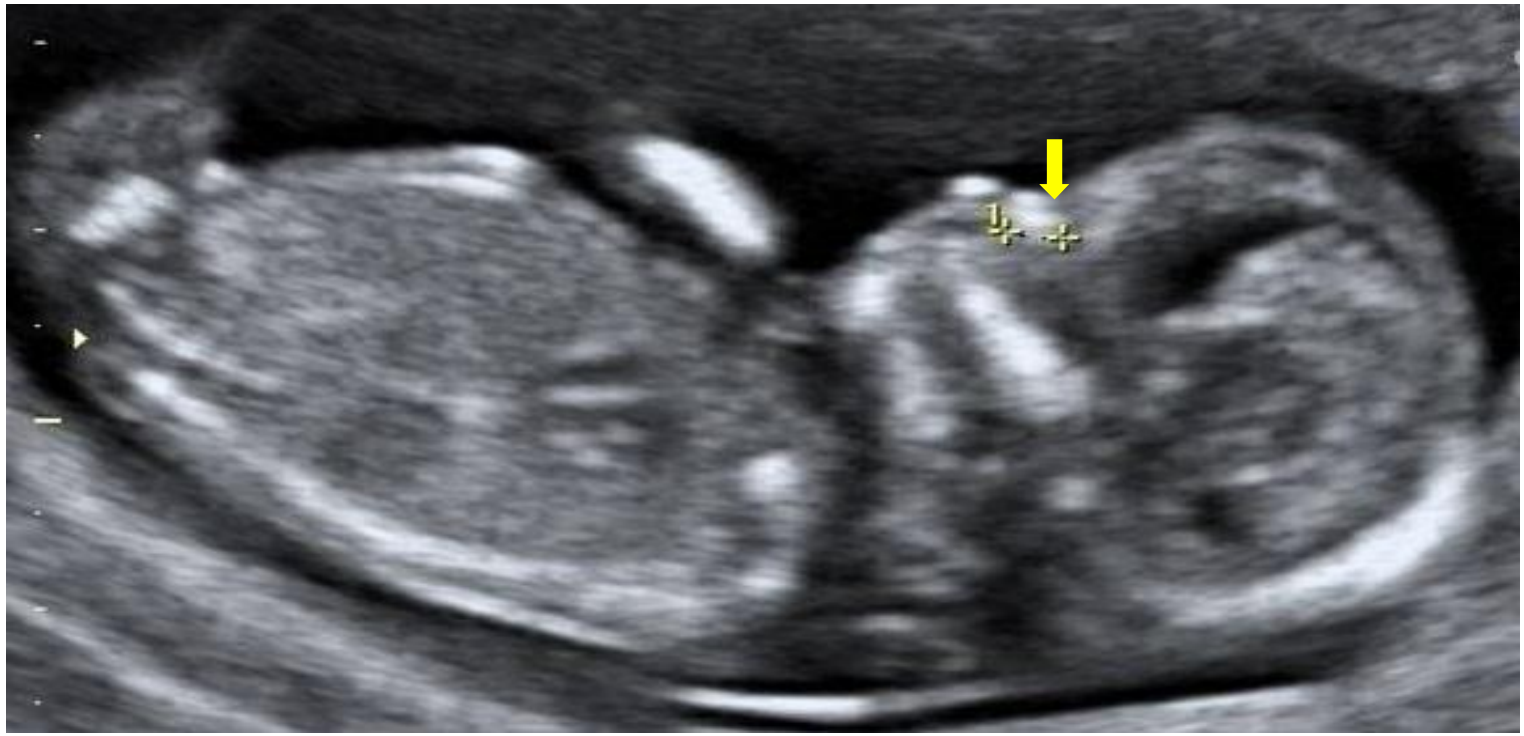
- ✓ 7~12 week
- ✓ 가장 정확한 Gestational Age 측정법

NT

- 11~13+6w
- True Sagittal line
- Inner-Inner
- 2.5~3mm
- 염색체 이상 선별

NT

Nasal bone



✓ 2~3mm정도 이며, 유무의 판별이 중요함.

2nd trimester

✓항상 확인

Å BPD (Biparietal diameter)

Å HC (Head Circumference)

Å AC (Abdominal Circumference)

Å FL (Femur Length)

2nd trimeaster

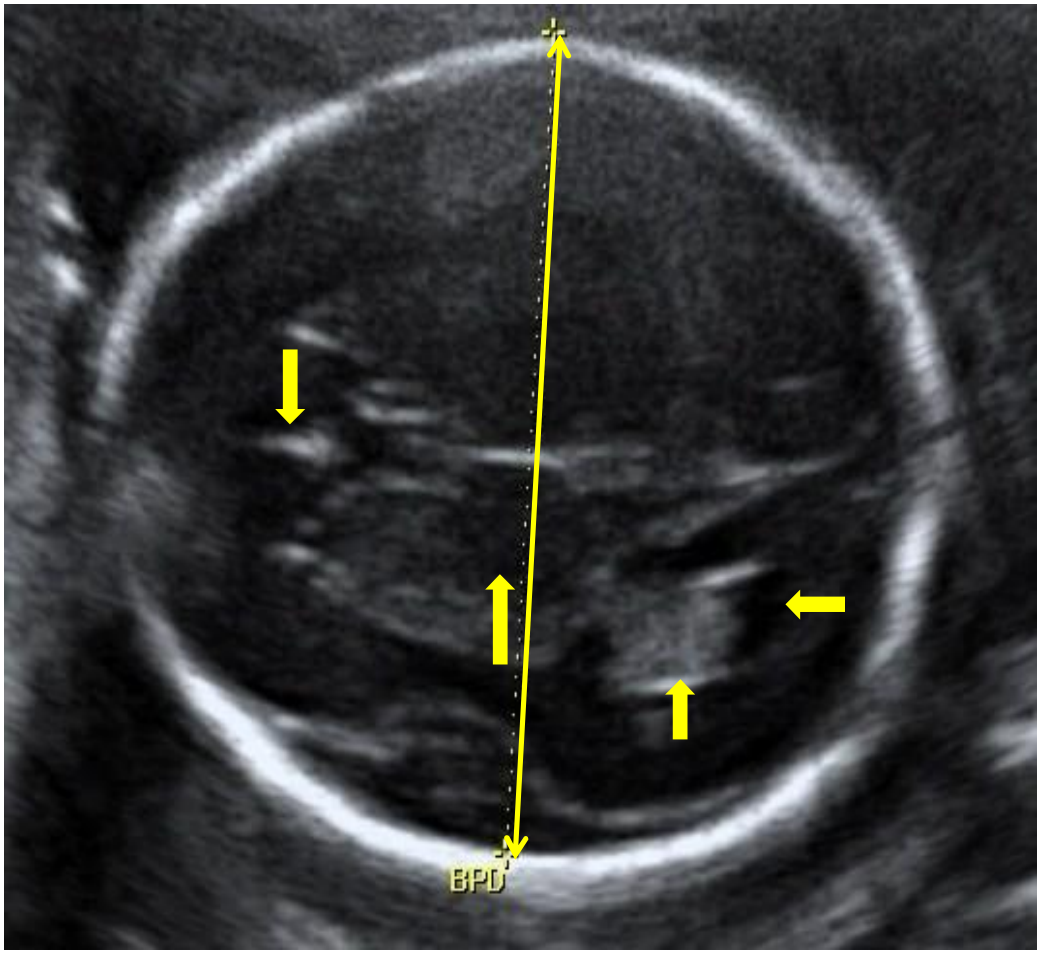
- ✓ **18~22w screening ultrasonography**
- Å **Skull & brain**
- Å **Face**
- Å **Heart**
- Å **Adbomen**
- Å **Lone bone**
- Å **AFI(7~25cm)**

Head

✓ 기본적으로 확인해야 하는 것

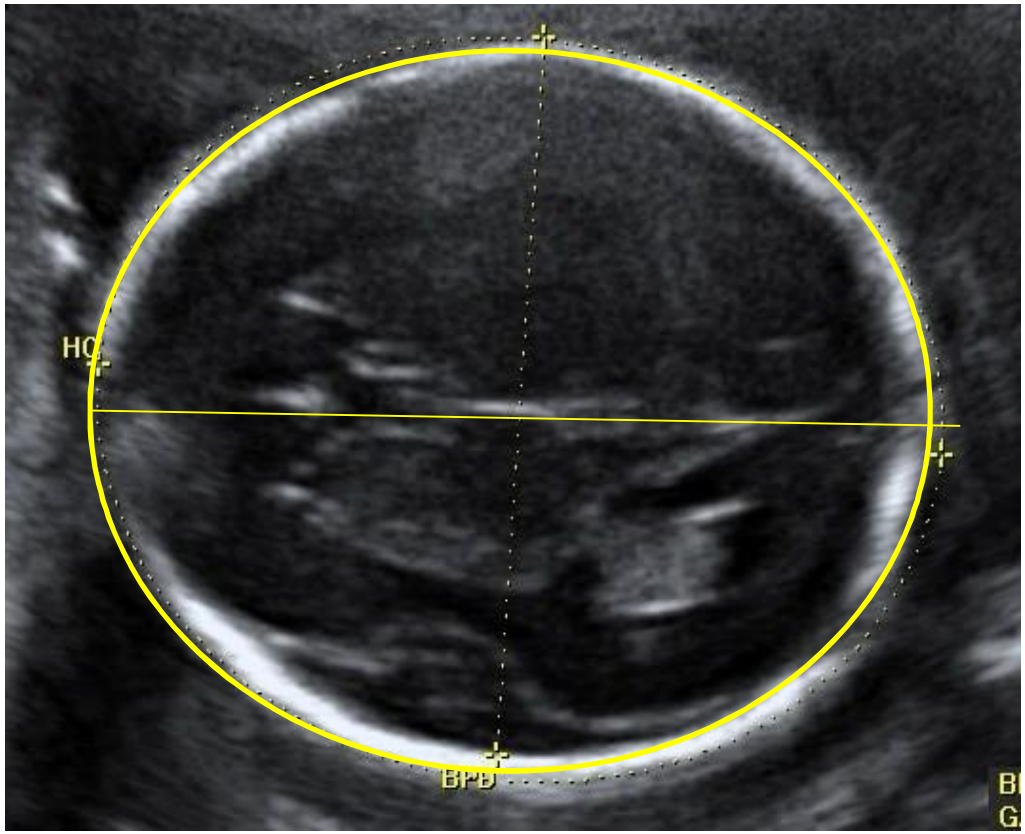
- Head shape
- Lateral Ventricle
- Cavum Septum Pellucidum
- Thalamus
- Cerebellum
- Cisterna magna, corpus callosum..

BPD



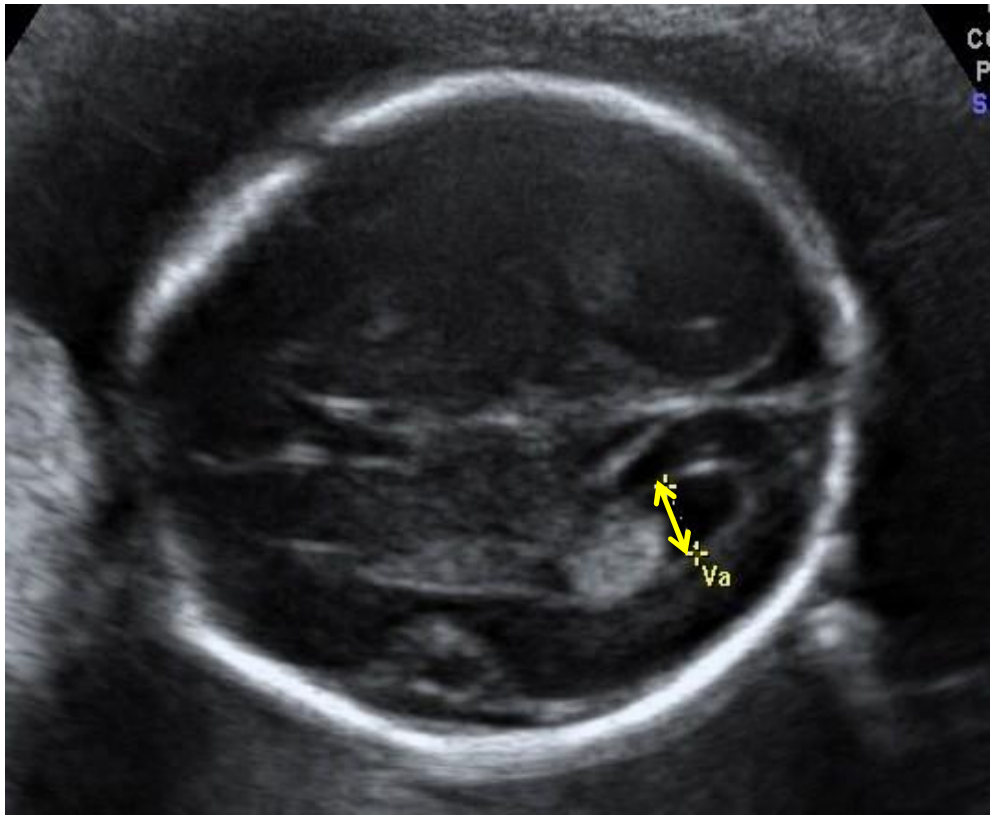
- Å Outer-Inner
- Å Symmetric plane
- ✓ Falx, CSP
- ✓ Thalamus
- ✓ Lateral Ventricle
- ✓ Choroid flexus

HC



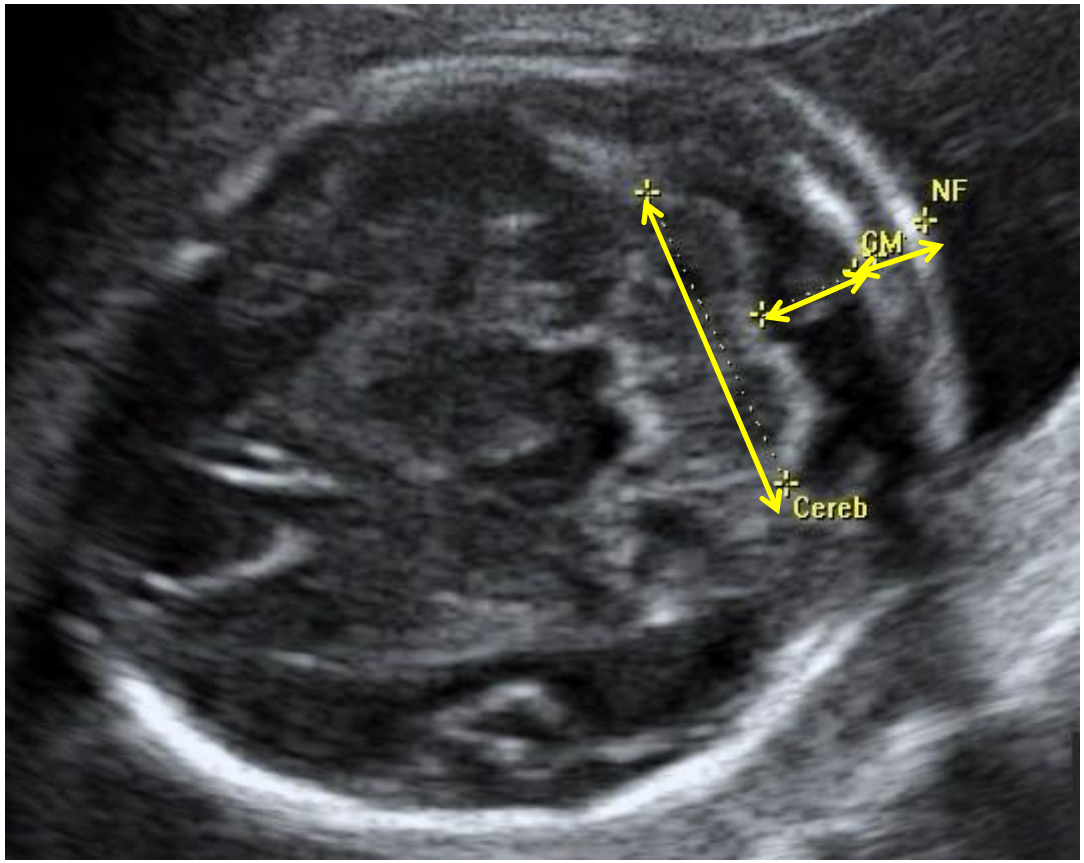
Cephalic index
= BPD/OFD*100
(75~85)

Lateral Ventricle



- Atrium의 choroid plexus 옆에서
- Inner-Inner 측정
- 임신 후반기까지 10mm정도

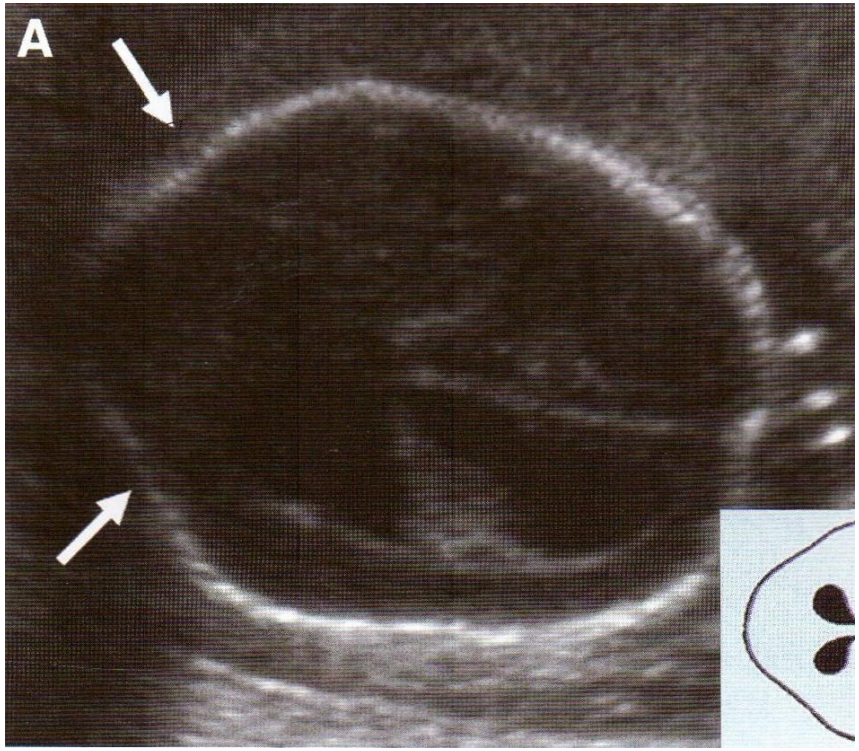
Cerebellum & CM



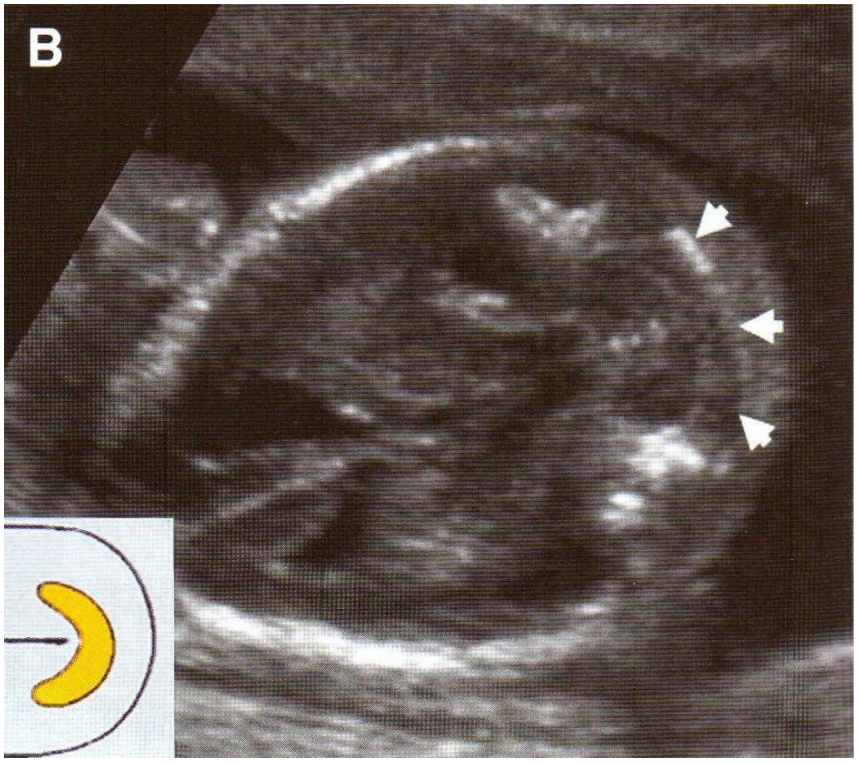
- Cerebellum
  - 임신 주수와 비슷한 크기
- CM-1cm
- NF-15~21w (6mm)

Skull

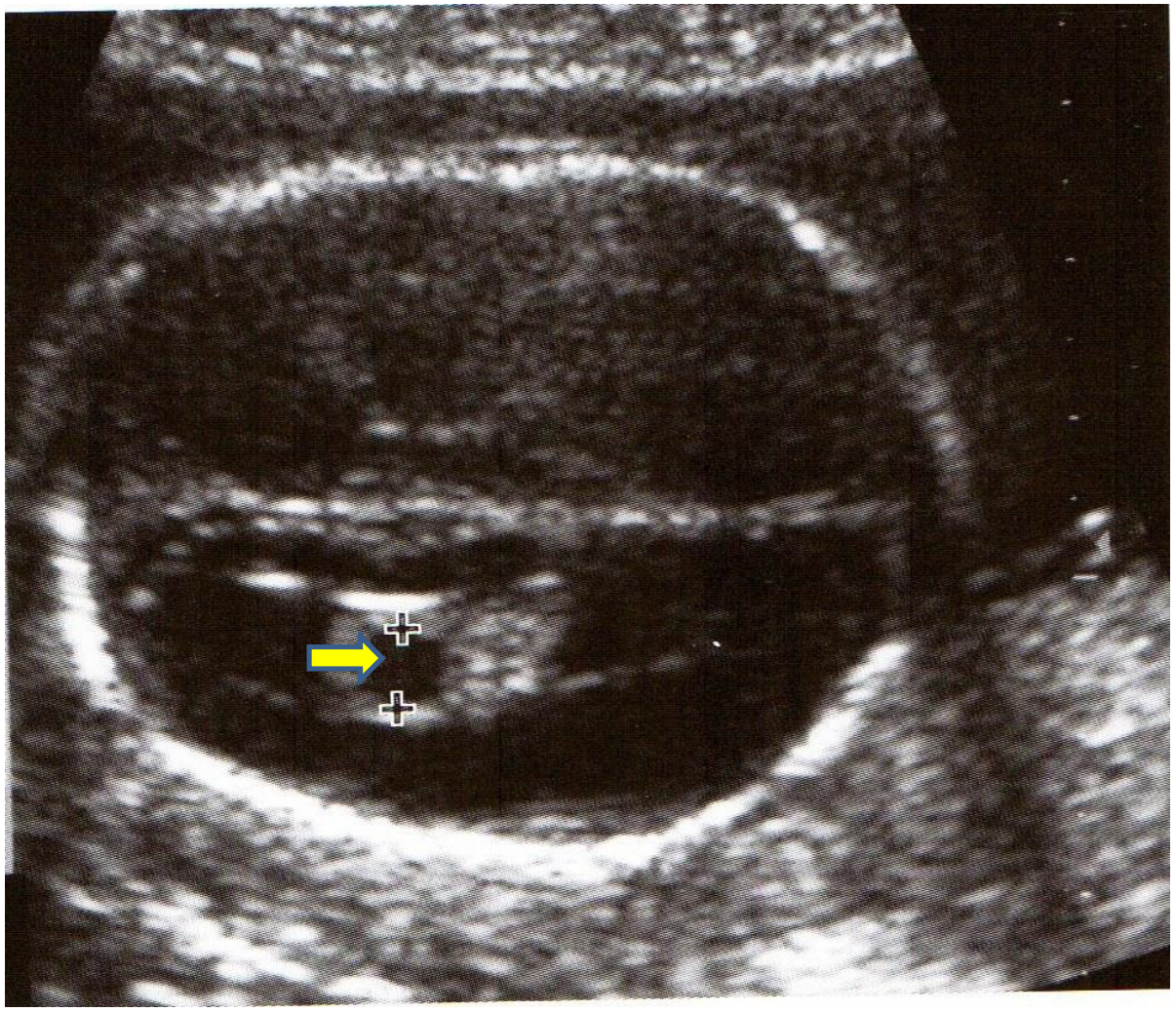
Lemon sign



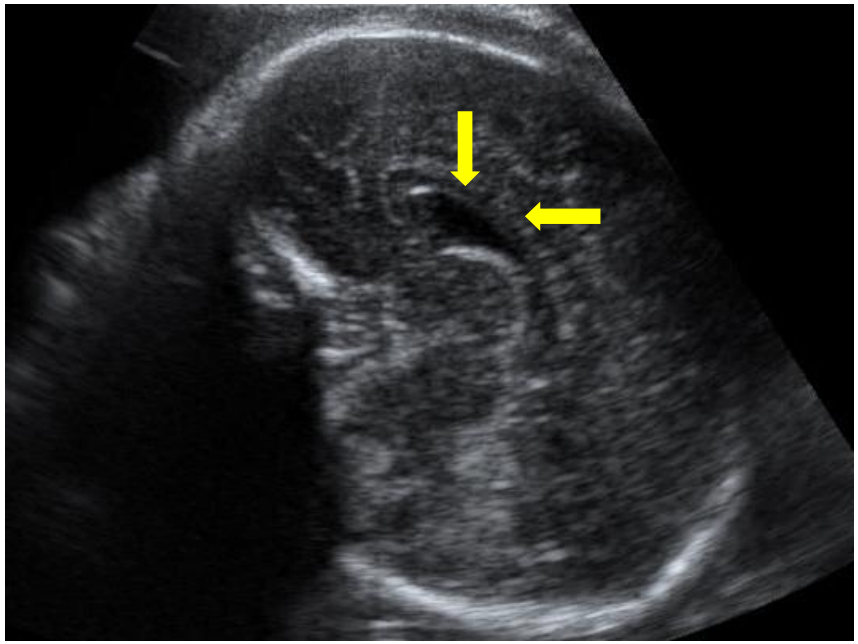
Banana sign

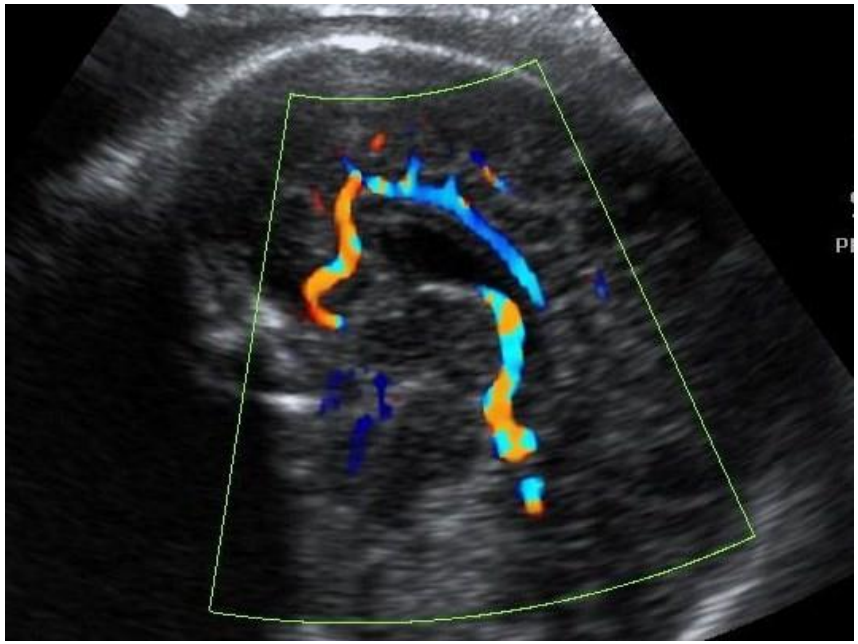


Choroid plexus cyst



Corpus Callosum





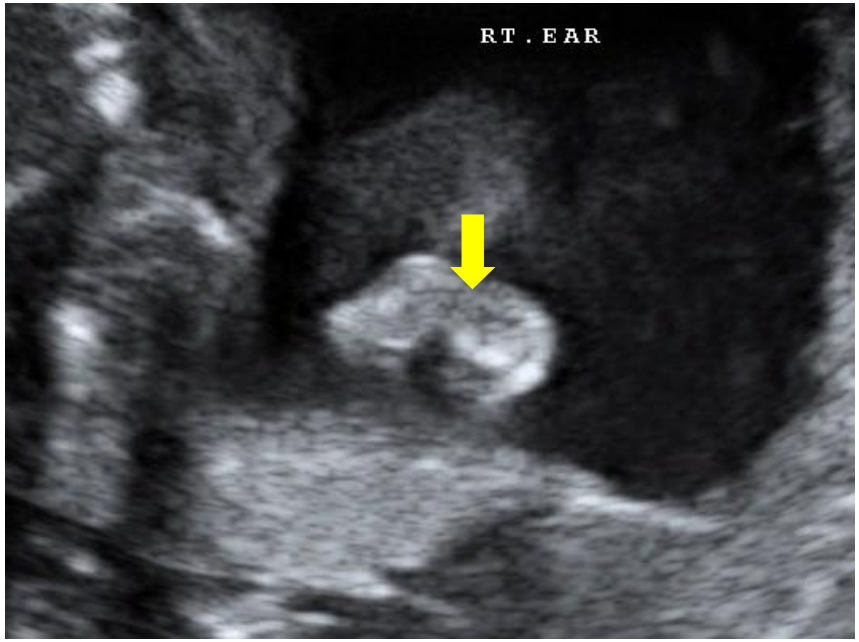
Face

Nose, lip, chin

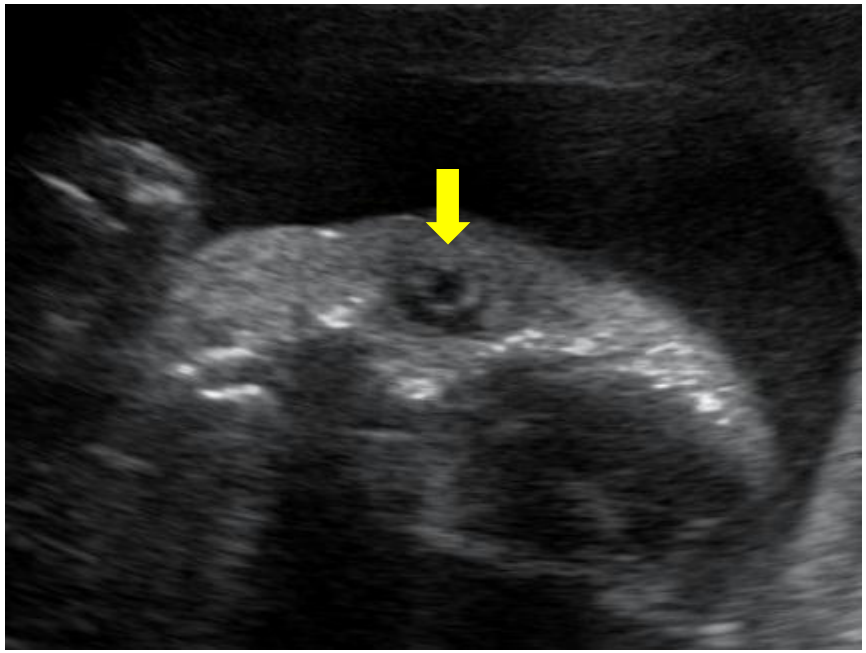
Profile

Ear & Eye

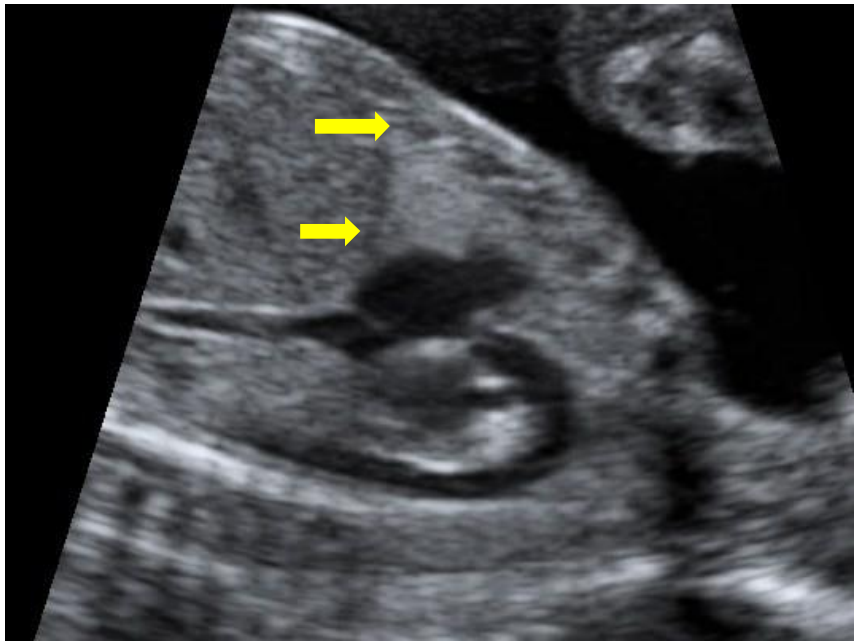
Ear lobe



Eyeball



Diaphragm & Spine

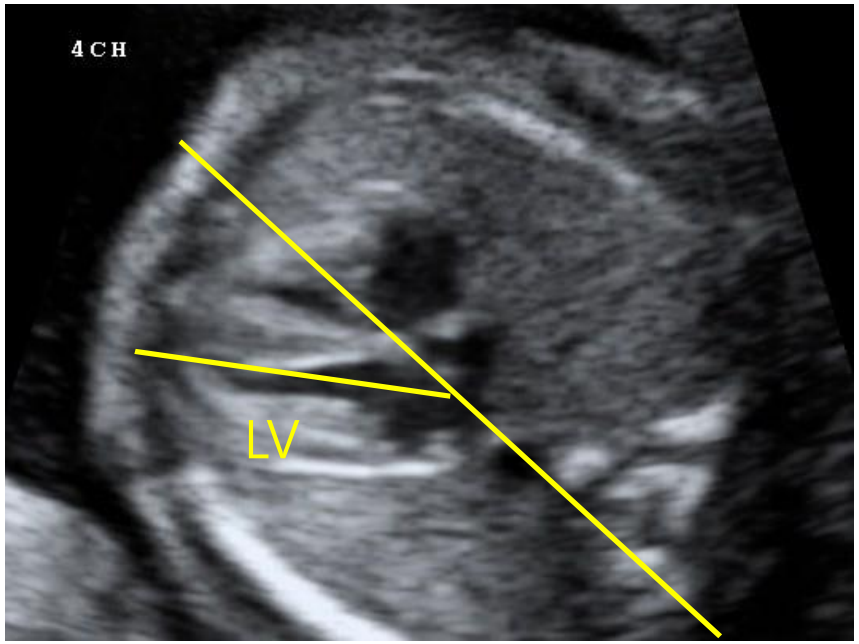


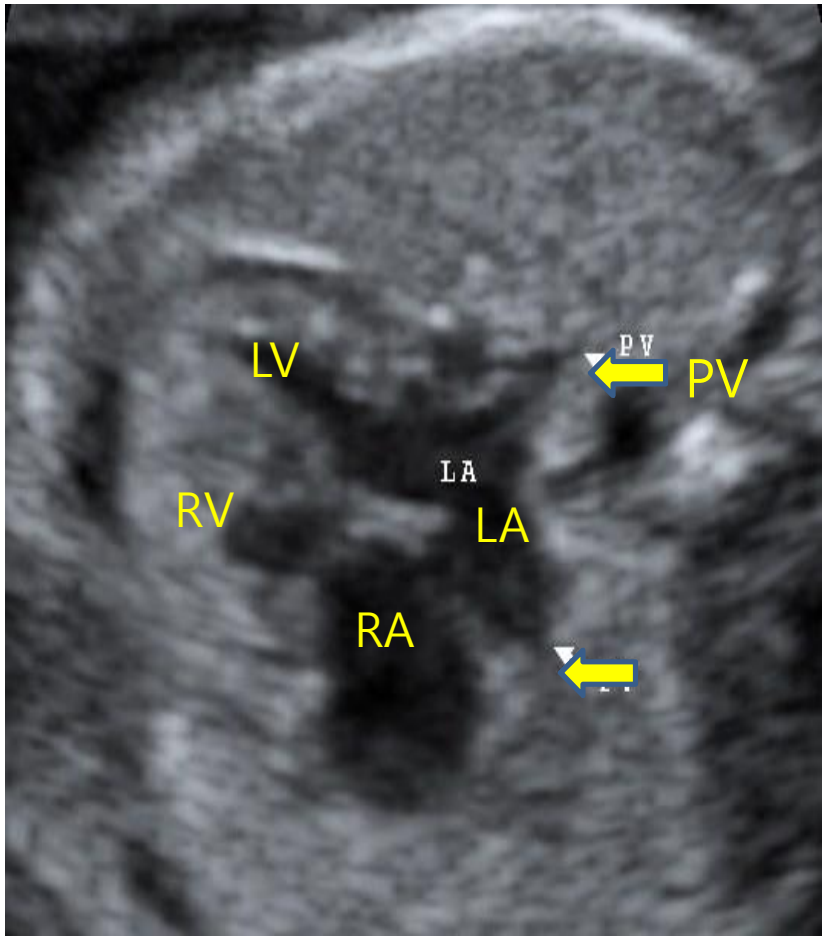
Heart

✓ 확인해야 하는 view

- 4ch
- 3vs
- LVOT
- RVOT
- Aortic arch
- Ductal arch

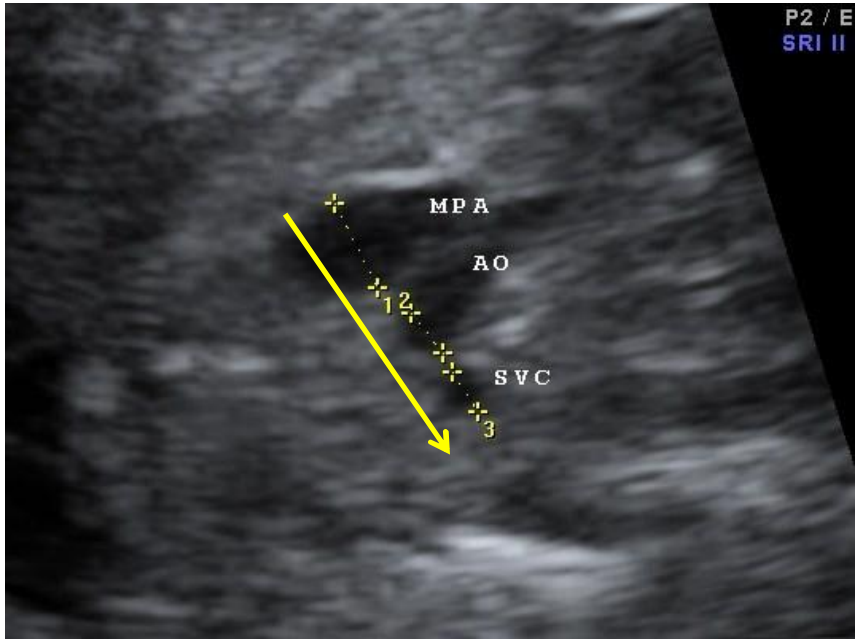
Heart : 4ch



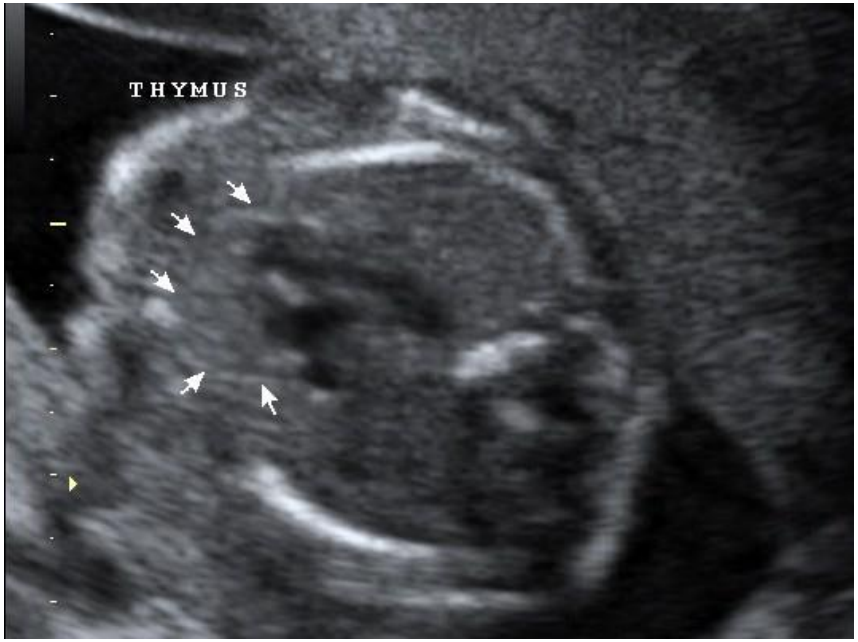


Heart : 3vs , Thymus

3VS

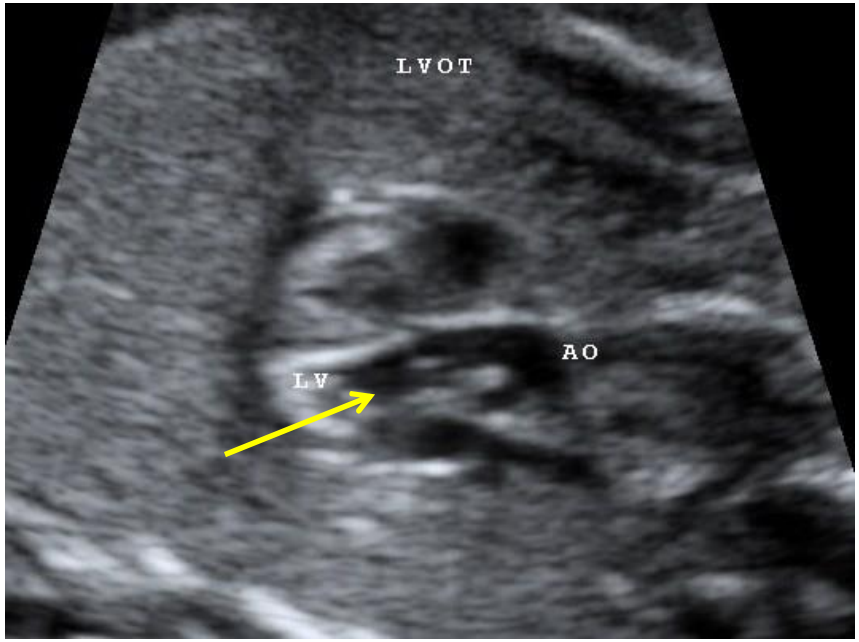


Thymus

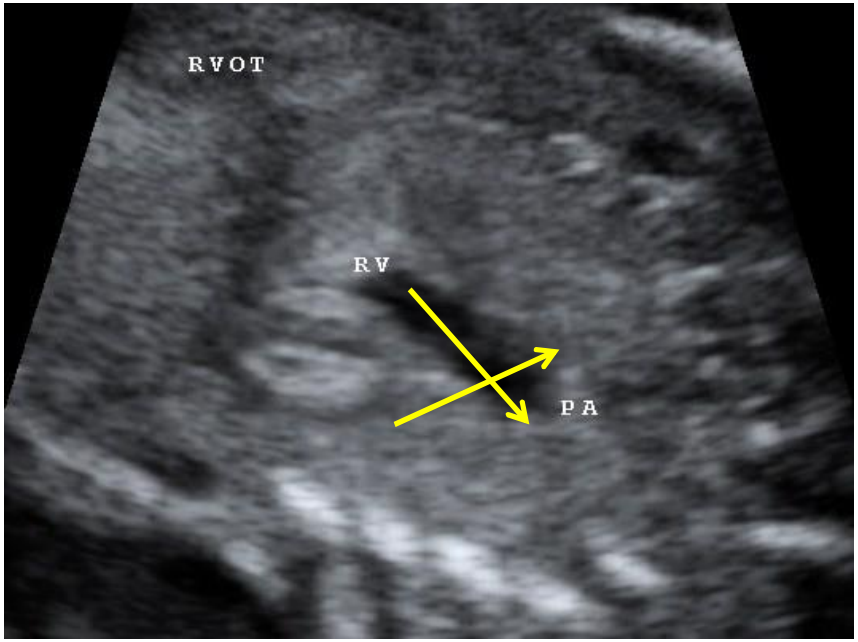


Heart : LVOT, RVOT

LVOT



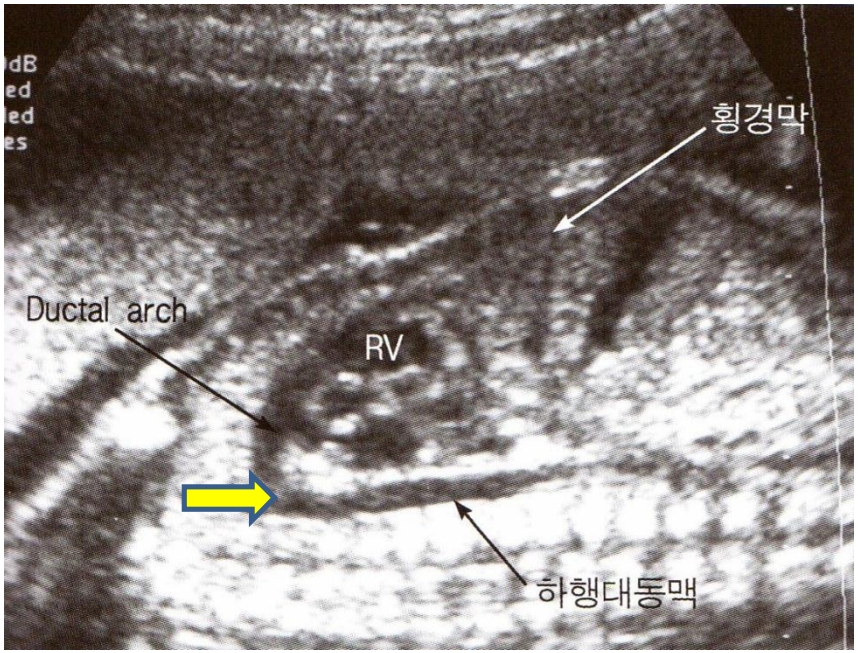
RVOT



Heart : Aortic arch, Ductal arch

Aortic arch

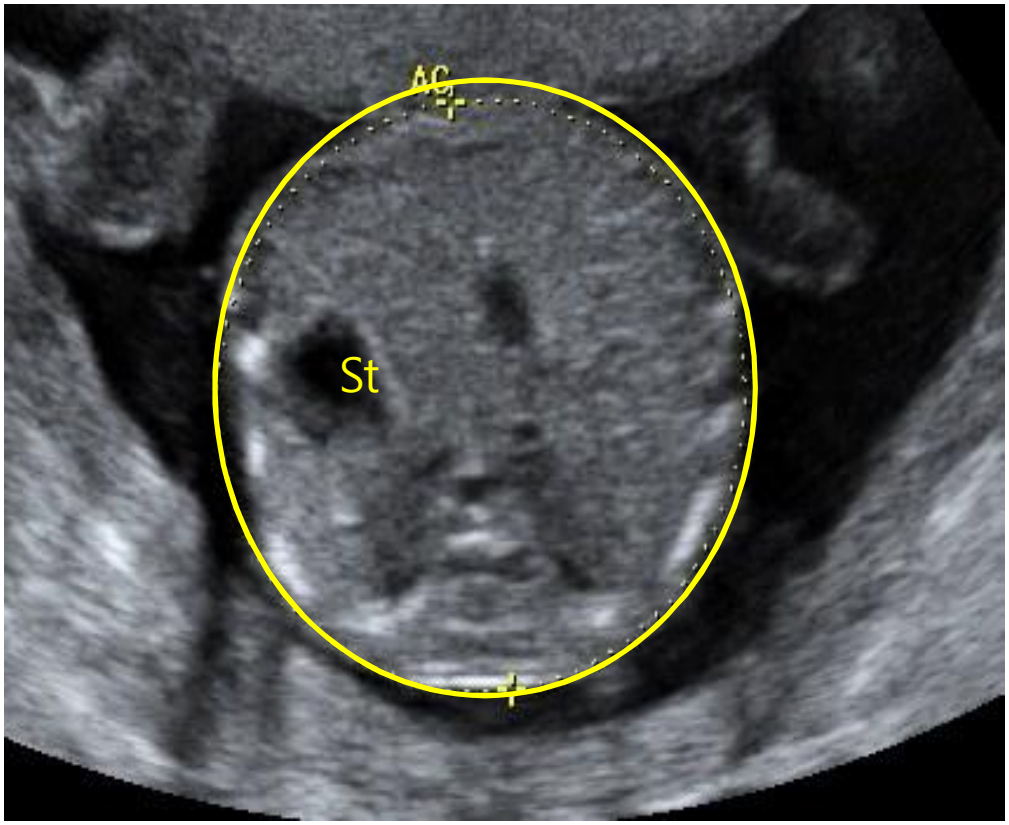
Ductal arch



Abdomen

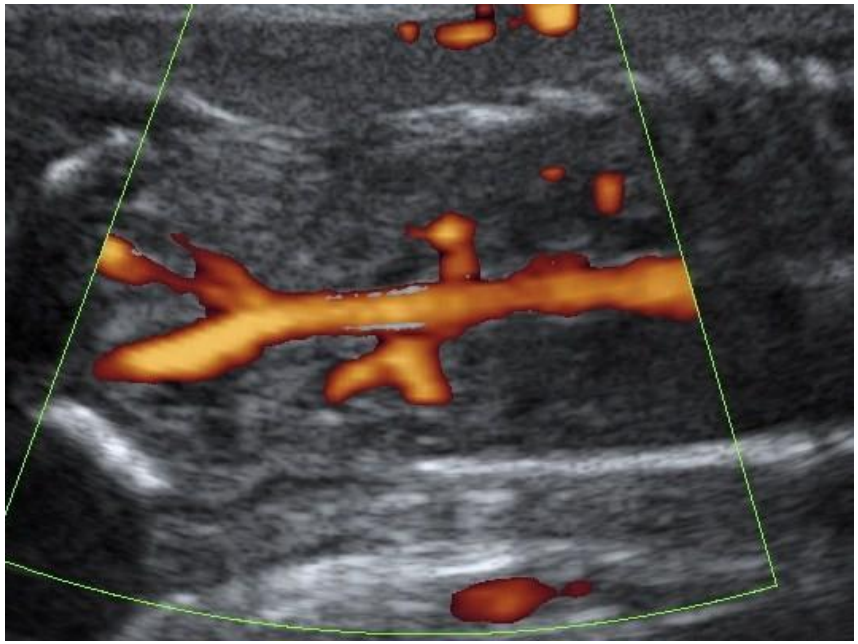
- Stomach
- Bowel (dilatation, echo)
- Liver, GB
- Kidney (renal pelvis)
- Bladder (umblical artery)
- Umblical insertion

Abdominal Circumference

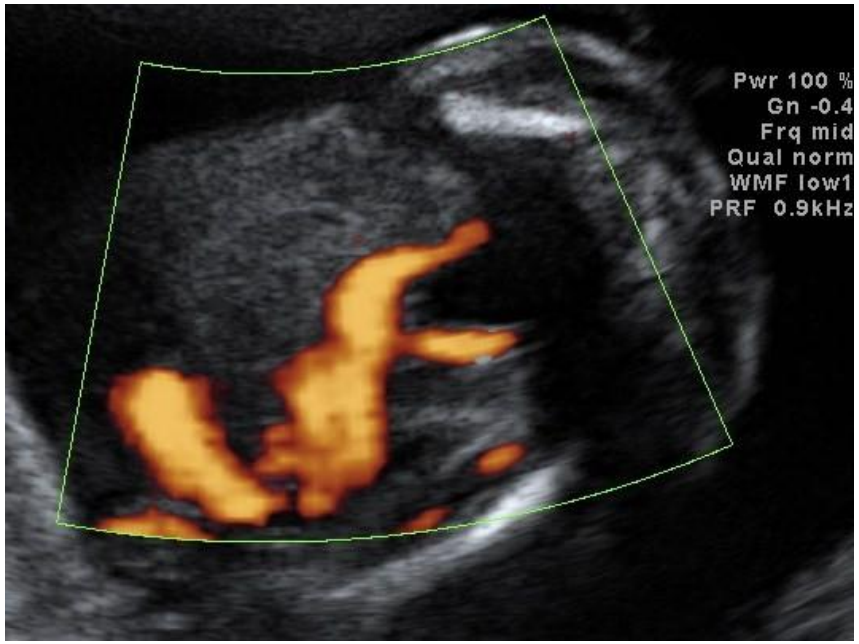


- PV bifurcation
- Spine
- Stomach
- Outer line
- 큰 variable

Kidney

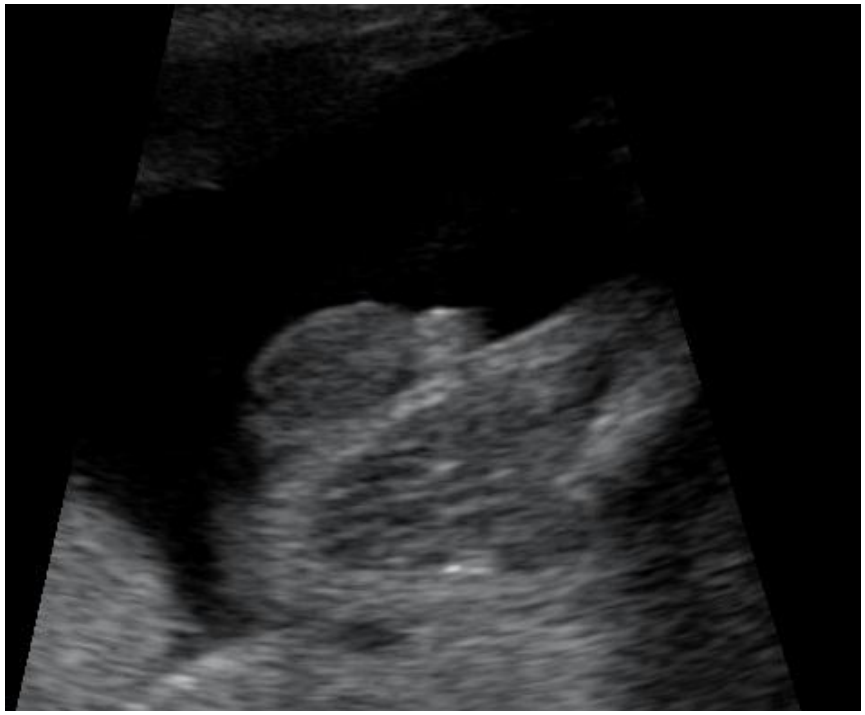


Bladder & Umbilical insertion



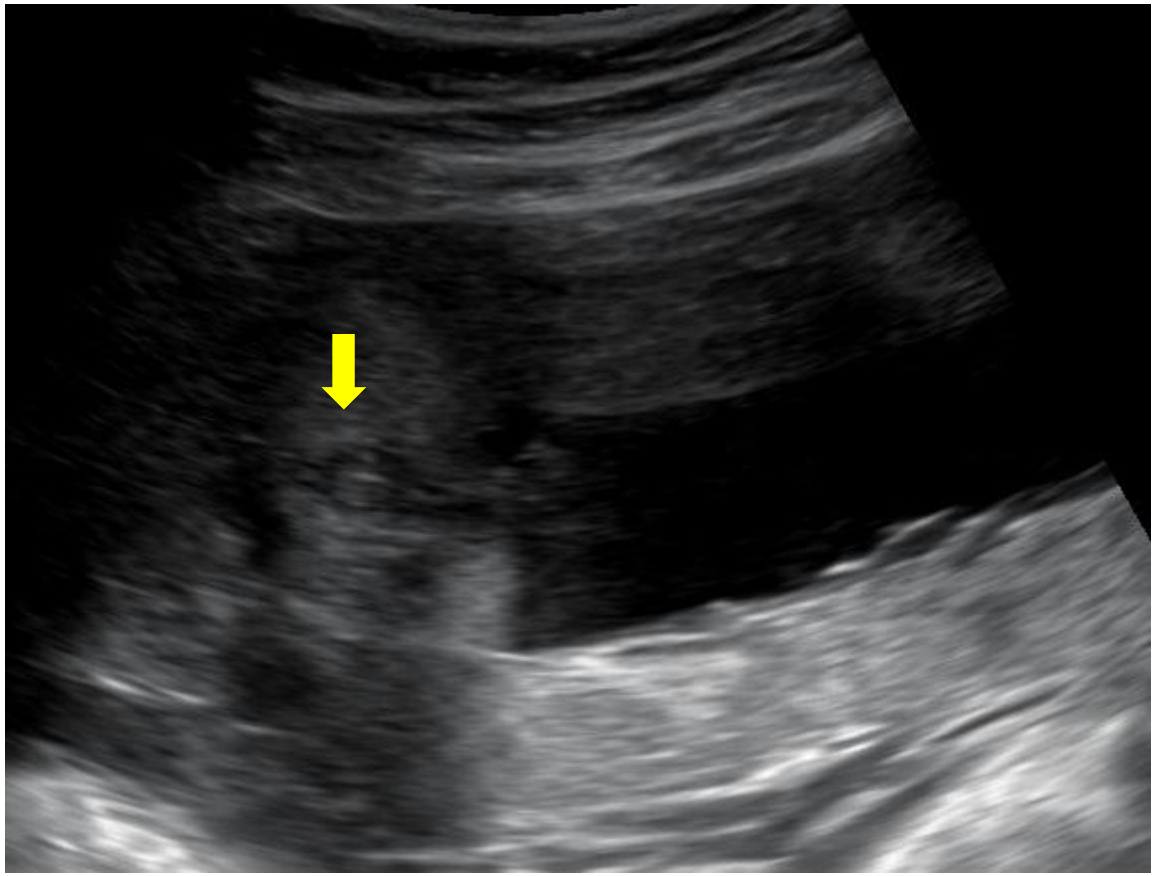
Gender

Male

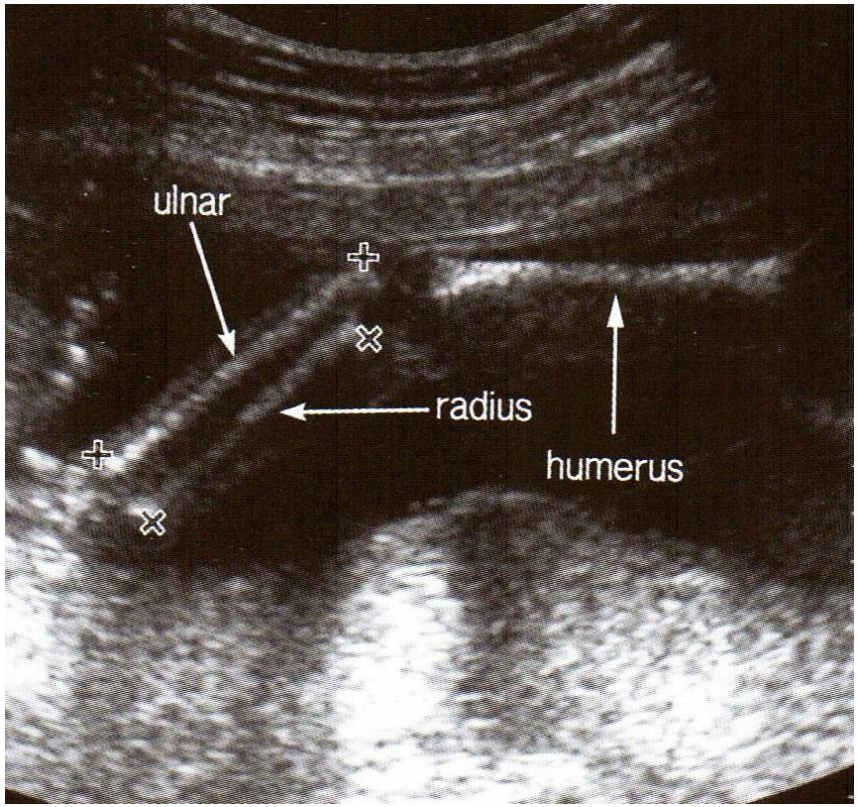


Female

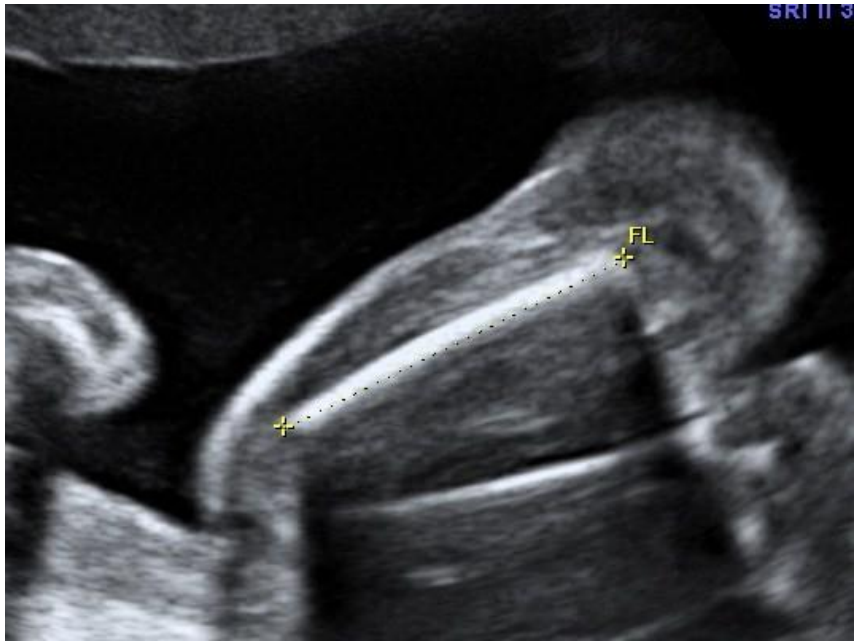
Anus

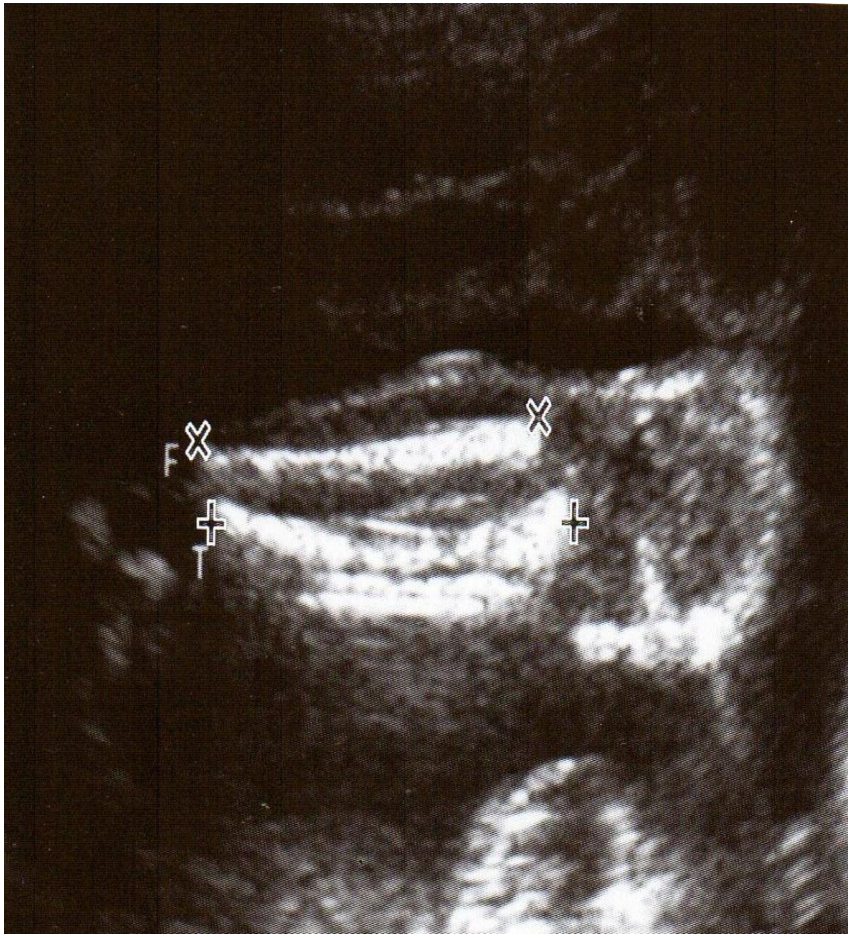


Extremity : Upper

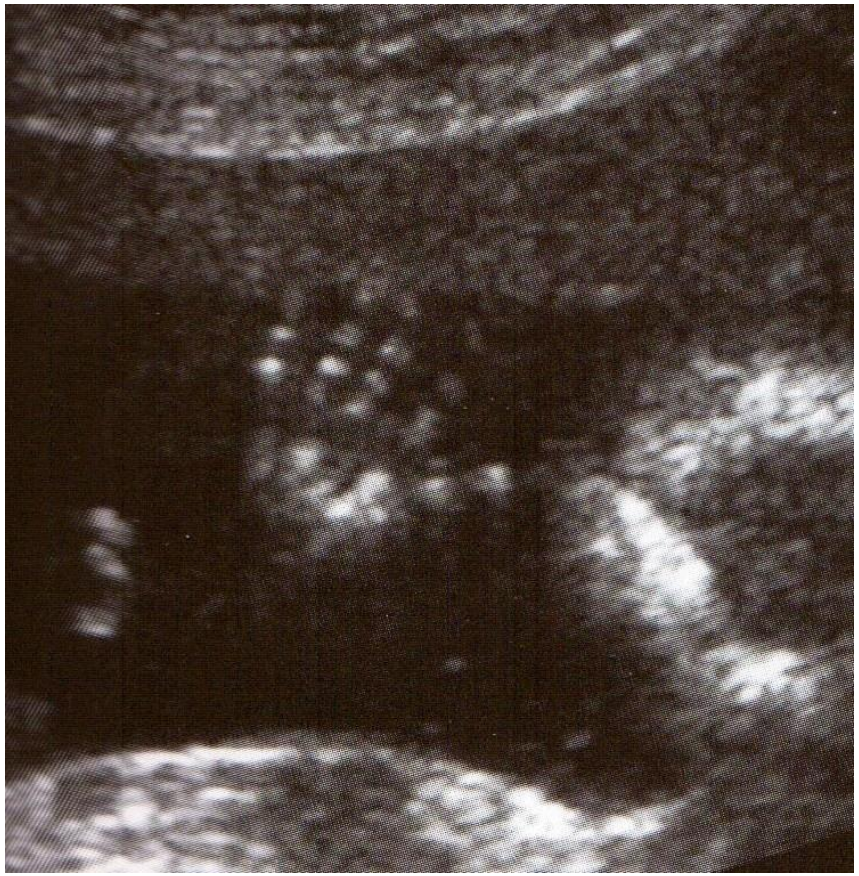


Extremity : Lower

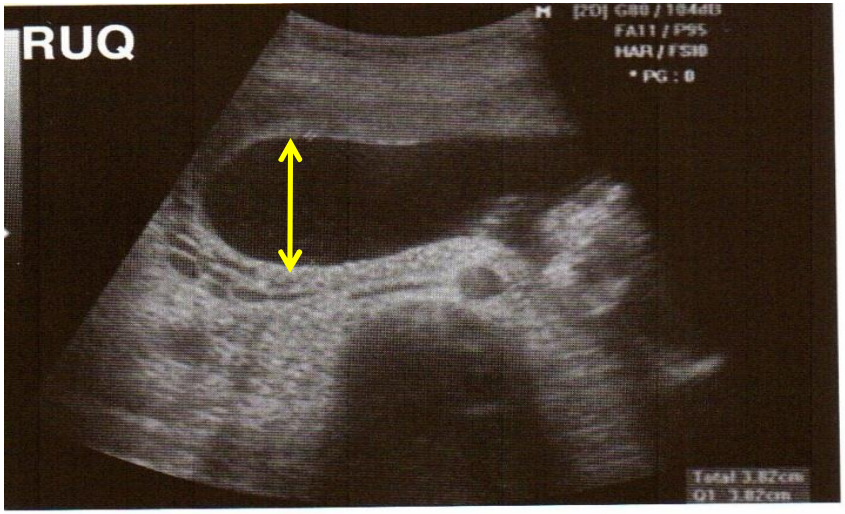


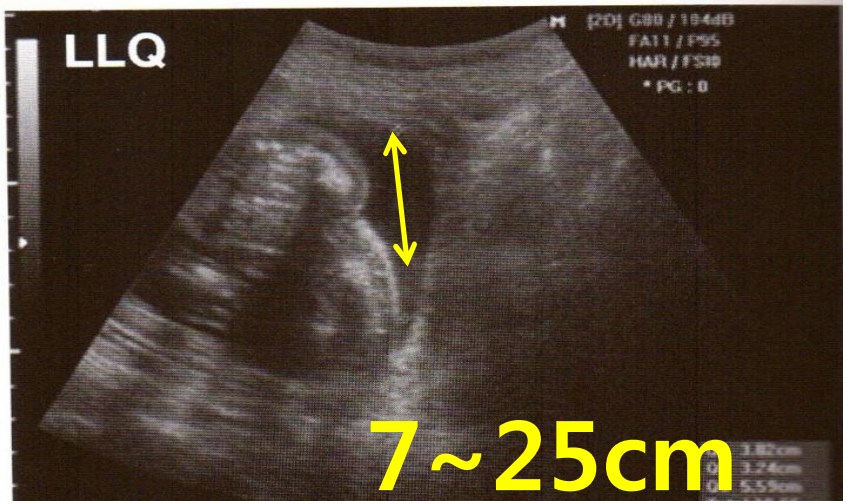


Hands & Feet

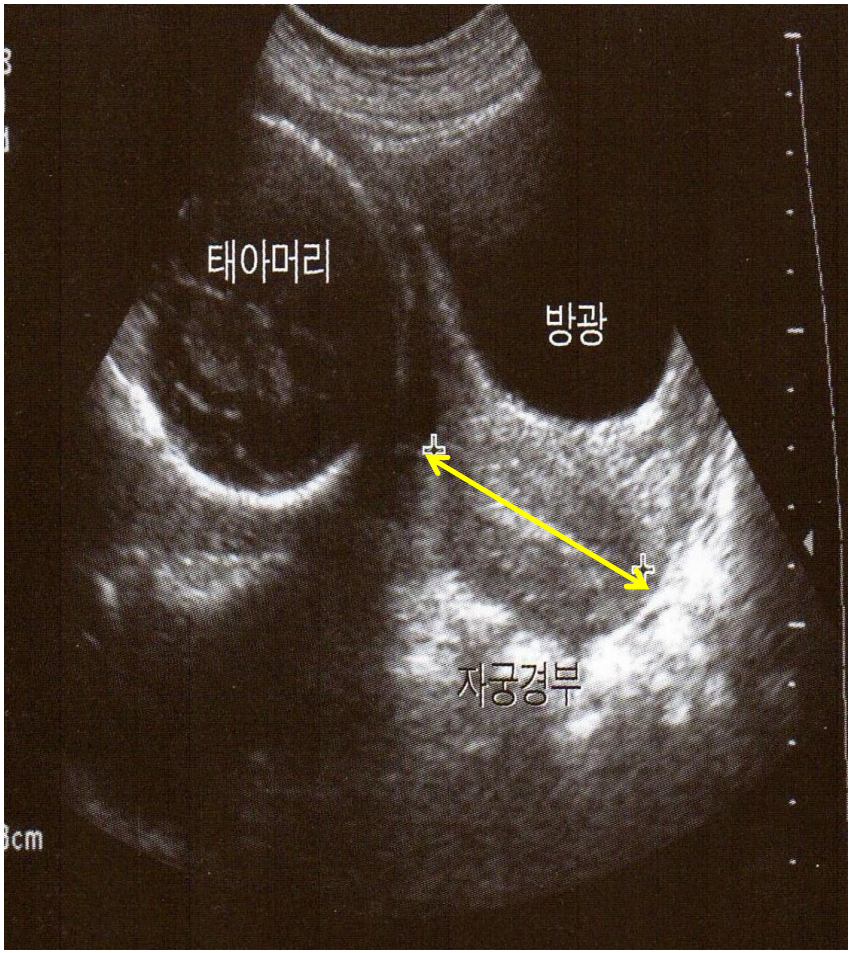


AFI

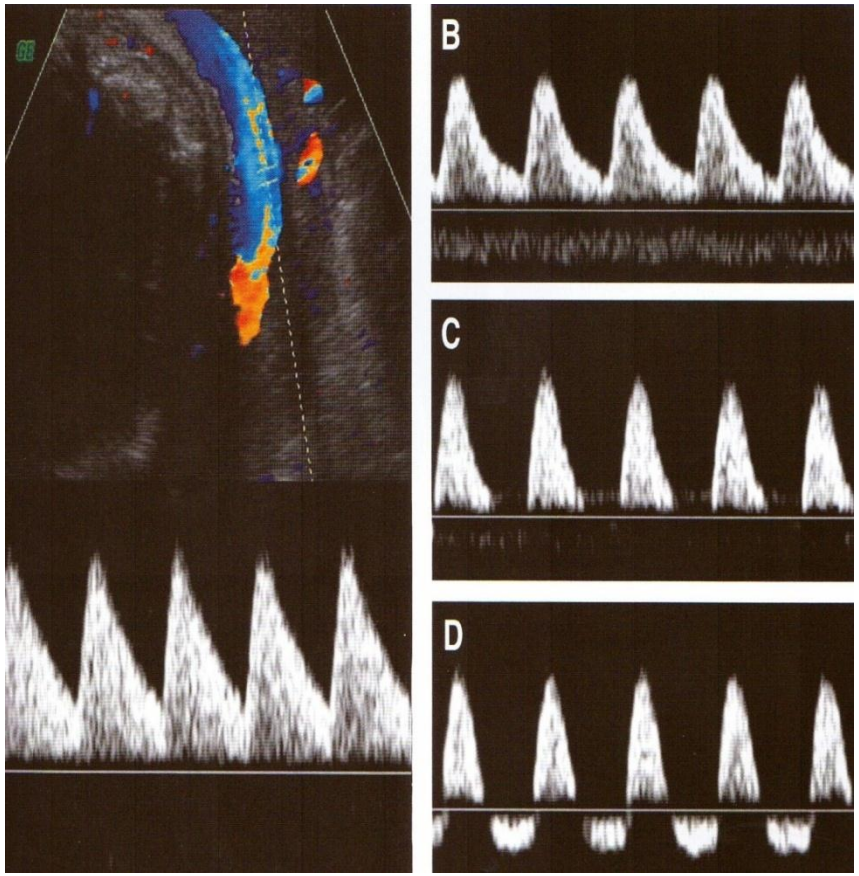




Placenta & Cervix



Doppler



- Placenta 가까운 UA
- 초기에는 높은 S/D(4) – 40w(2)
- ED값이 낮을수록 태아-태반혈관의 저항이 증가한 것으로 태반기능의 소실과 비례

Thank you!

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MEDICAL SYSTEMS

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