**Pelvic USG**

- **Quality of pelvic USG**
  - Correct section of probes
  - Scanning experience of the sonographer

- **Optimal image quality: Higher frequency**
  - TA (2-7 MHz) vs. TV (5-12 MHz)
  - After TA then TV

- **Measurement**
  - Sagittal uterine views: uterine size & endometrial thickness
  - Transverse uterine views
  - Cervical image & cul-de-soc (sagittal view)
  - Bilateral ovarian view
  - *Any uterine or ovarian masses should be measured in three planes for size*

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**Uterus size**

<table>
<thead>
<tr>
<th></th>
<th>Pre-pubertal</th>
<th>Nulliparous</th>
<th>Multiparous</th>
<th>Post-MP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Length</strong></td>
<td>2 - 4.4cm</td>
<td>6-8.5cm</td>
<td>8 - 10.5cm</td>
<td>3.5 - 7.5cm</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>-</td>
<td>3-5cm</td>
<td>4-6cm</td>
<td>2-4cm</td>
</tr>
</tbody>
</table>

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**Pitfall**

- Exaggerated cervix
- Ultrasound transducer
Calcification of uterine arcuate arteries

Uterus

Transverse view or coronal view

Calcifications in a discontinuous parallel line configuration located in the mid to outer aspect of the uterine myometrium

Pitfall

Normal endometrium

- Proliferative phase: ‘Triple layer’
  - Basal layer: Echogenic
  - Functional layer: relatively hypoechoic
  - Central opposing surface: thin echogenic line (midline stripe)

- Secretory phase
  : single echogenic band

- Menstrual phase
  : thin echogenic band

EM thickness

- Sagittal plane
- Hypoechoic halo (MM inner layer) 제외

Range of normal EM thickness

- Premenopausal woman
  - proliferative phase: 4-8 mm
  - peri-ovulatory: 6-10 mm
  - secretory: 7-14 mm

- Post menopausal woman: <4-5 mm

- P-MP bleeding + EMT >5mm
  → F/E 필요 (HT시: cutoff thickness 8mm)