Chapter 4
The Female Cycle

Sue Benzonelli-Blanchard

Objectives

• Describe the physiology of the menstrual cycle
• Identify the hormonal changes that occur during the various ovulatory and endometrial phases.
• Explain ovum development and its passage from the ovary to the uterus.
• Discuss the function of the female cycle.

Pelvic Anatomy

Uterine Layers

• Perimetrium
• Myometrium
• Endometrium

Uterine Size

<table>
<thead>
<tr>
<th>Table 4-11</th>
<th>Uterine Size† ††</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Width</td>
</tr>
<tr>
<td>Infanteile</td>
<td>2-3</td>
</tr>
<tr>
<td>Neonate</td>
<td>2-5</td>
</tr>
<tr>
<td>Pediatric</td>
<td>5-7</td>
</tr>
<tr>
<td>Pubescent</td>
<td>6-8</td>
</tr>
<tr>
<td>Adult</td>
<td>5-10</td>
</tr>
<tr>
<td>Postmenopausal</td>
<td>3-5</td>
</tr>
</tbody>
</table>

Fallopian Tube

• Originate at upper portion of the uterus
• Sections
  • Isthmus
  • Ampulla
  • Infundibulum
Ovaries
- Almond-shaped
- Located lateral to the uterus
- Size varies

Physiology
- Hormone regulation
  - GnRH
  - FSH
  - LH
  - Estrogen
  - Progesterone
  - Inhibin

Female Reproductive Endocrine Glands
- Controlled by
  - Negative feedback loop
  - Positive feedback loop
Female Reproductive Endocrine Glands

Oogenesis

Follicle Phases
- Follicular
- Ovulatory
- Luteal

Follicular Phase Ovary

Corpus Luteal Cyst
Postmenopausal Uterus/Endometrium