

# **Syrian Private University**

## **Medical Faculty**

### **Medical Terminology**

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**Lecture 8**

# Female Reproductive System



# Objectives

**After studying this chapter you will be able to:**

- **Name the parts of the female reproductive system and discuss the function of each part**
- **Define combining forms used in building words that relate to the female reproductive system**
- **Identify the meaning of related abbreviations**
- **Name the common diagnoses, clinical procedures, and laboratory tests used in treating the female reproductive system**

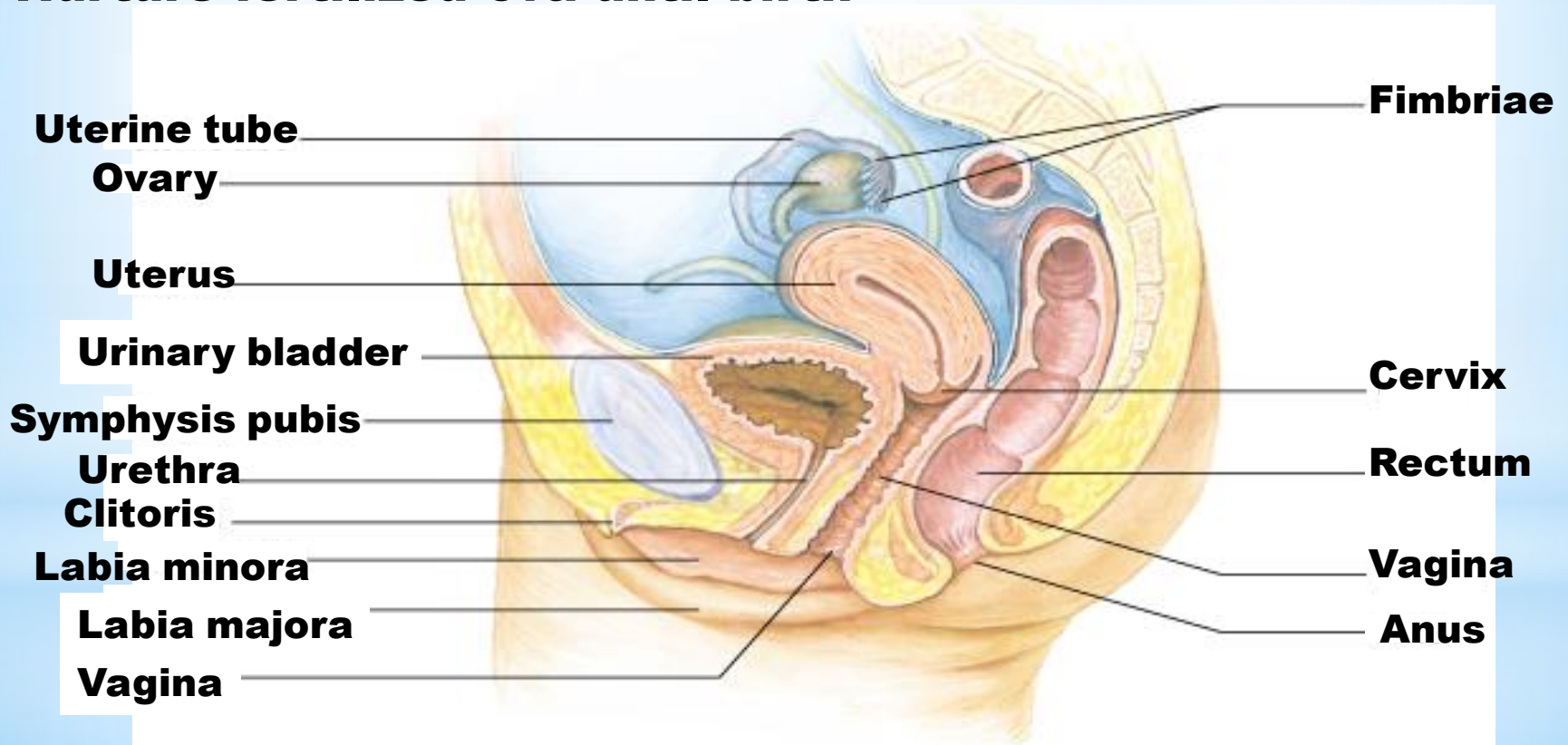
# Objectives cont'd

- **List and define the major pathological conditions of the female reproductive system and discuss the function of each part**
- **Explain the meaning of surgical terms related to the female reproductive system**
- **Recognize common pharmacological agents used in treating the female reproductive system**

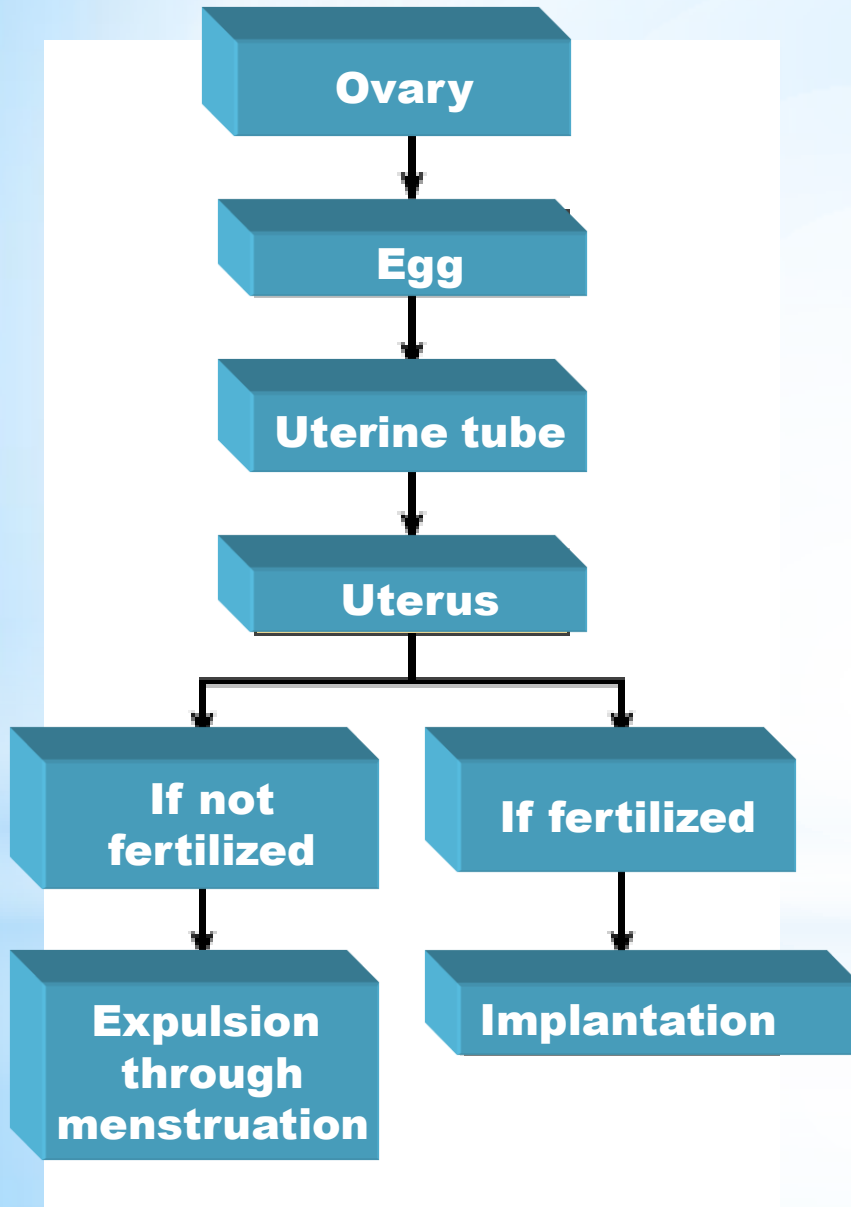
# Structure and Function

## The Female Reproductive System Functions to:

- Produce female sex cells (ova) in the ovaries or gonads
- Move the ova to the site of fertilization
- Nurture fertilized ova until birth



# Structure and Function



## Path of an Egg in the Ovarian Cycle

- Ovaries release the eggs cyclically from the **graafian follicle**
- The fertilized egg is transported to the uterus where it develops into an embryo
- At the end of gestation the infant is born through the vagina or surgically through the abdomen in a **Cesarean** delivery

# Structure and Function

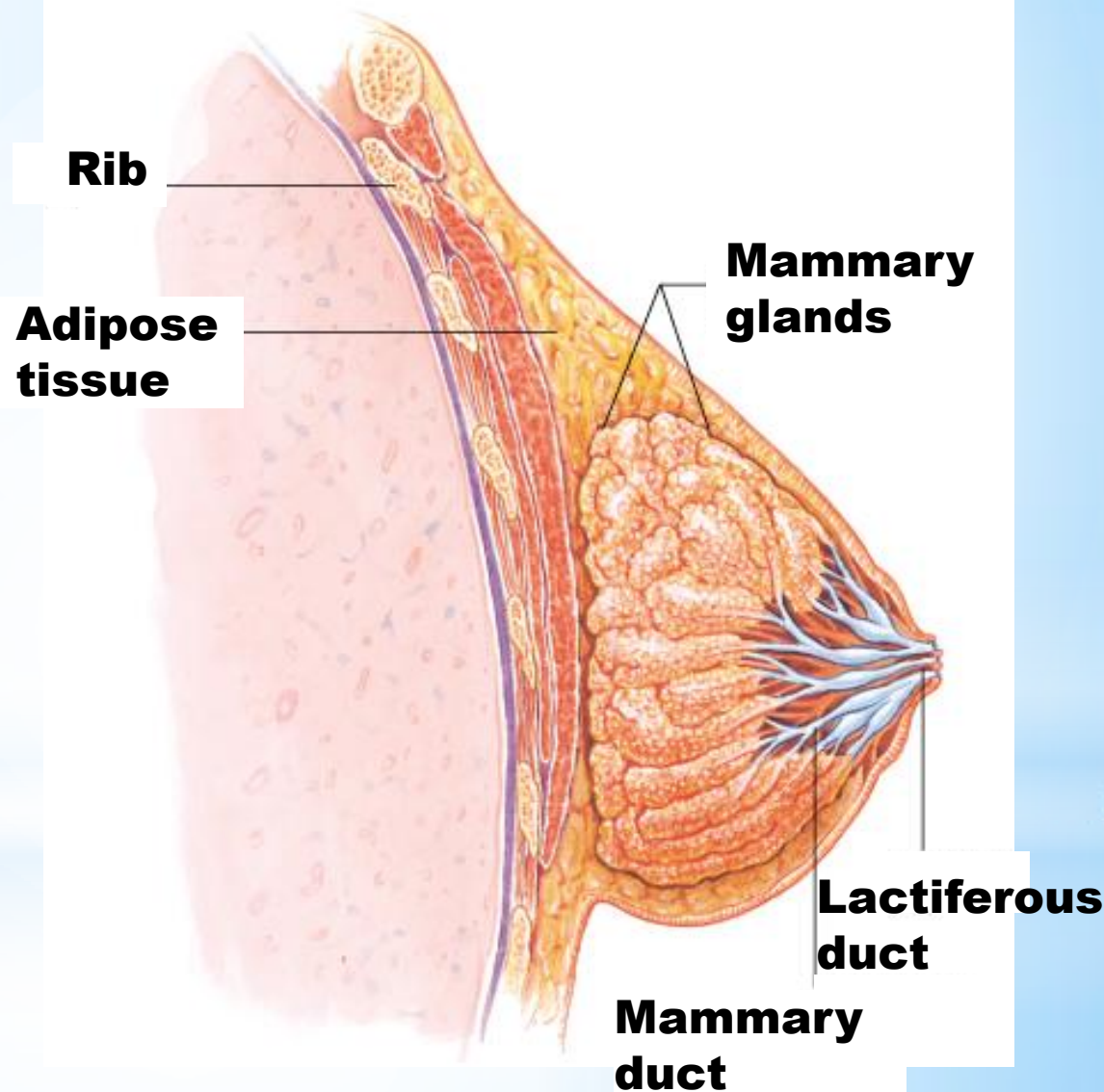
## The Female Breast

- Also called **mammary glands**. It is an accessory organ of the female reproductive system

- Provides milk to nurse the infant (**lactation**) after birth

- Consists of mammary glands and ducts

- The dark-pigmented area surrounding the nipple is called the **areola**





# Structure and Function

## Reproductive Organs

### Ovaries

- **Two small solid oval structures**
- **Located in the pelvic cavity**
- **Produce ova and secrete female hormones**
- **At birth most female ovaries contain between 200,000 to 400,000 immature ova (**oocytes**) in each ovary**

➔ **Between the ages of 10-14 years, the first menstruation (**menarche**) occurs.**

➔ **Menopause** signals the end of the childbearing years.

➔ **Climacteric** is the period leading up to menopause.



# Structure and Function

## Uterus

- Is about 3 inches long
- Consists of three parts
  - Upper portion → **fundus**
  - Middle portion → **body**
  - Lower portion → **cervix**
- Consists of three layers
  - Outer layer (**perimetrium**)
  - Middle layer (**myometrium**)
  - Inner layer (**endometrium**)

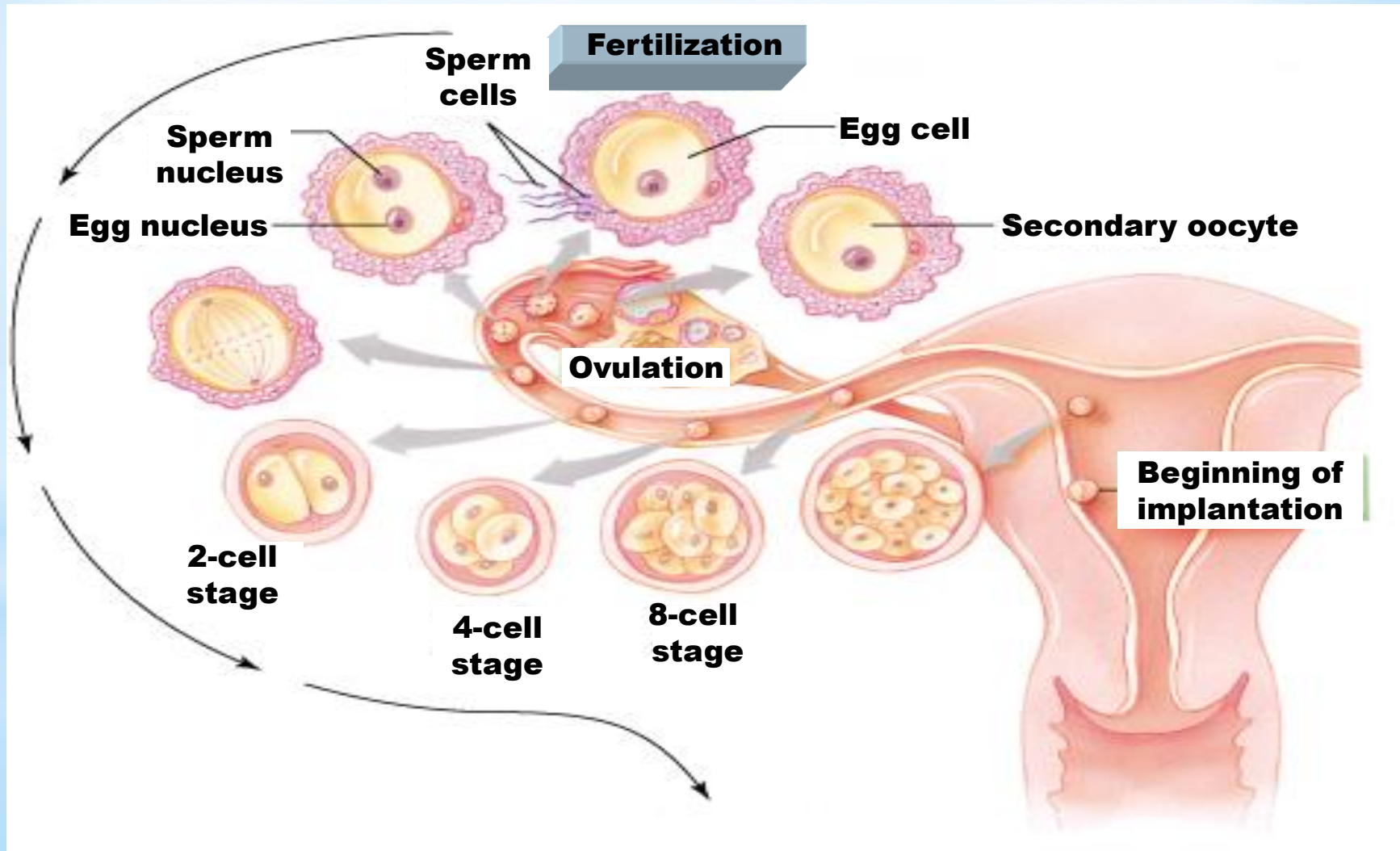
**The ovum, fertilized or not, will end up in the uterus.**

**• If fertilization does not occur, the ovum will be released along with the endometrium during menstruation.**

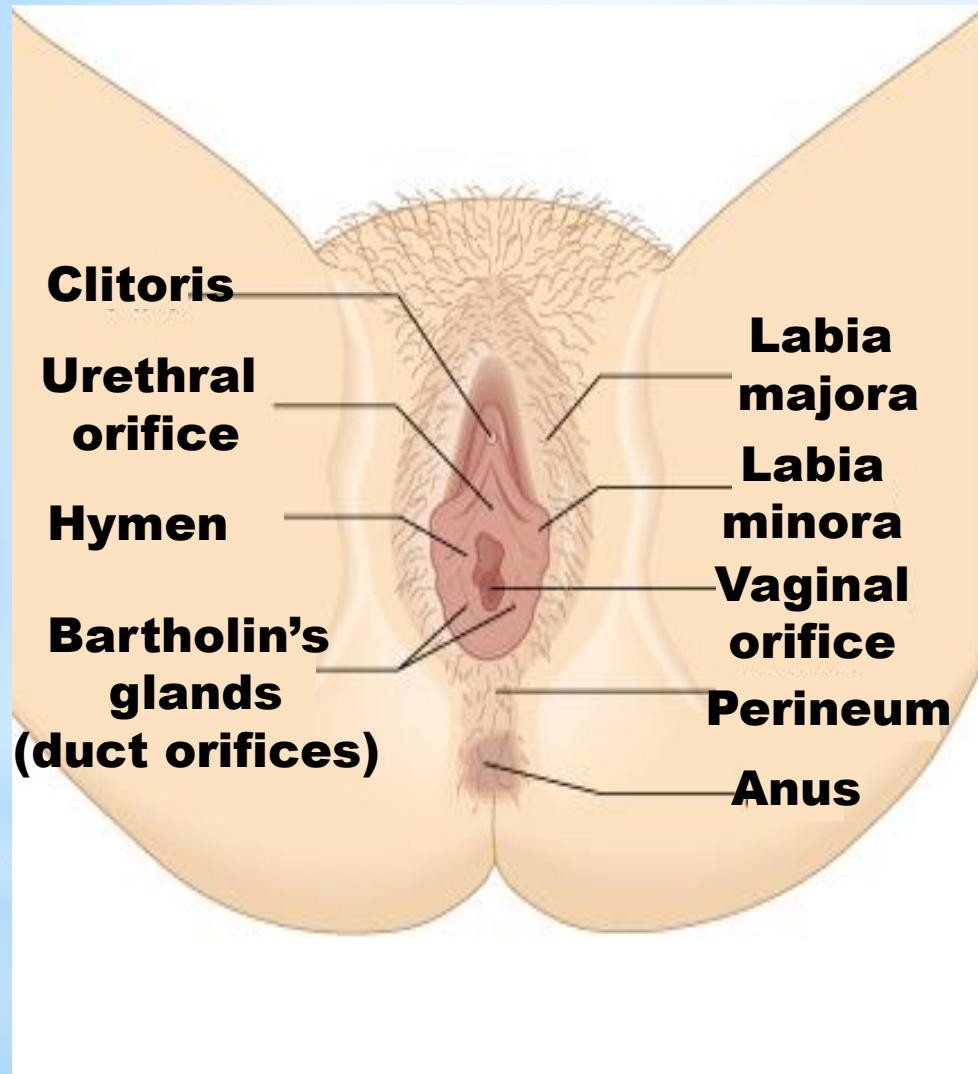
**• If fertilization does occur, the ovum will attach to the endometrium where it will be nourished for the duration of gestation (about 40 weeks).**

# Structure and Function

## Movement of an Oocyte During the Female Cycle



# Structure and Function



## External Genitalia

- Known collectively as the **vulva**
- Consists of the:
  - mons pubis
  - labia majora
  - labia minora
  - clitoris
  - perineum

**Bartholin's glands** secrete a fluid into the vagina and is located in the space between the labia minora

# Structure and Function

**estrogen**

**progesterone**

**prolactin**

**oxytocin**

**Human  
chorionic  
gonadotropin  
(HCG)**

**Luteinizing  
hormone (LH)**

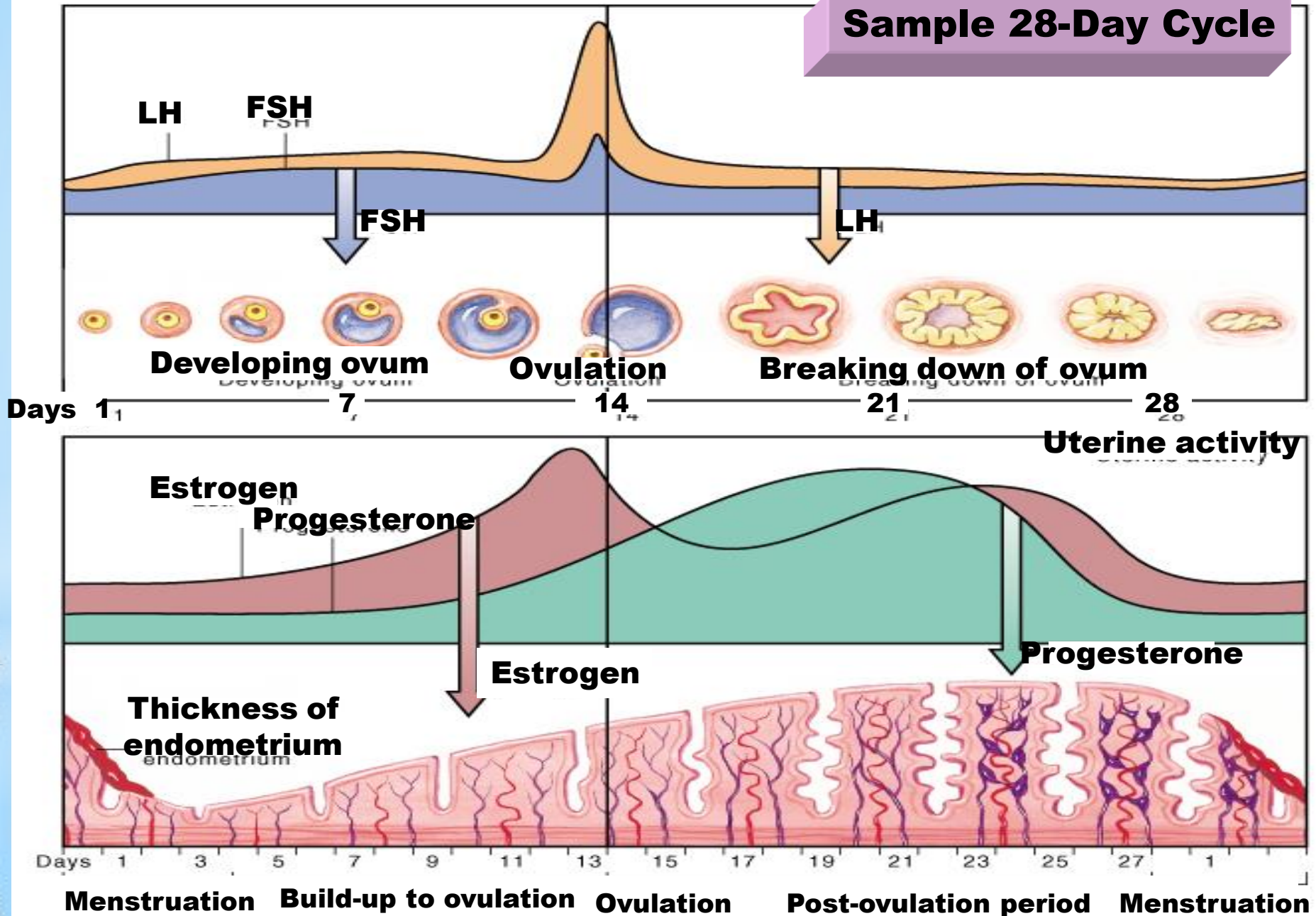
**Hormones  
and  
Cycles**



**Follicle-stimulating hormone (FSH)**

# Structure and Function

## Sample 28-Day Cycle





# Structure and Function

## Preventing Fertilization

**At the point of ovulation, fertilization can be prevented with **contraception**.**

## Forms of Contraception

- **Condom**
- **Intrauterine device (IUD)**
- **Spermicide**
- **Diaphragm**
- **Rhythm method**

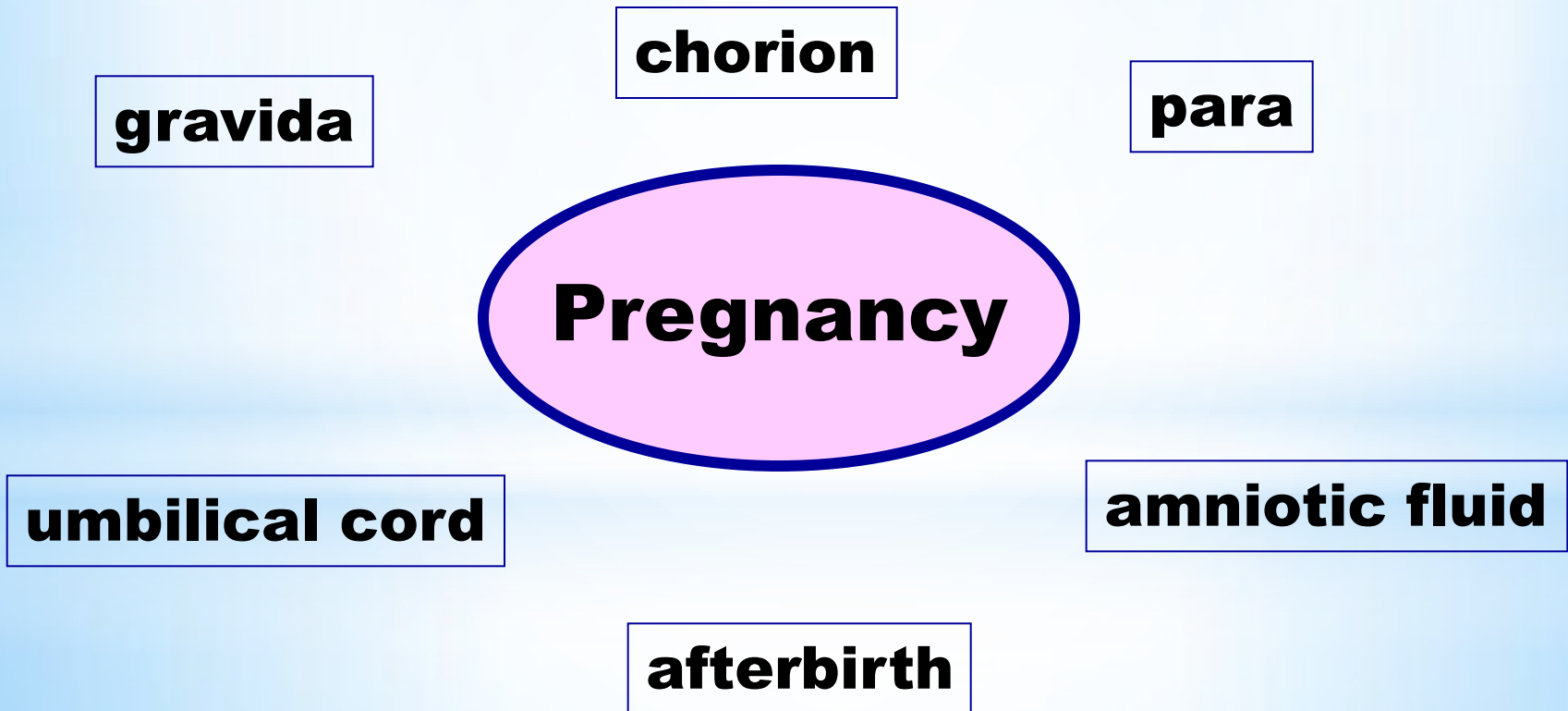
## NOTE:

**High doses of estrogen and progesterone can prevent ovulation.**

# Structure and Function

## Fertilization

**As a result of sexual intercourse (**coitus**), fertilization may occur.**





# Combining Forms and Abbreviations

## Combining Form

## Meaning

<b>amni(o)</b>	→	<b>amnion</b>
<b>cervic(o)</b>	→	<b>cervix</b>
<b>colp(o)</b>	→	<b>vagina</b>
<b>episi(o)</b>	→	<b>vulva</b>
<b>galact(o)</b>	→	<b>milk</b>
<b>gynec(o)</b>	→	<b>female</b>
<b>hyster(o)</b>	→	<b>uterus</b>

# Compiling Forms and Abbreviations

## Combining Form

## Meaning

**lact(o)** — — — — — **milk**

**mamm(o)** — . — . — . — . — . — . **breast**

**mast(o)** \_ . \_ . \_ . \_ . \_ . \_ . **breast**

**men(o) — . — . — . — . — . — . — . menstruation**

**metr(o) — . — . — . — . — . — . — . uterus**

**oo** — . — . — . — . — . — . — . — . — . **egg**

**oophor(o) — . — . — . — . — . — . — . — . — . ovary**

# Combining Forms and Abbreviations

## Combining Form

## Meaning

**ov(i)** → **egg**

**ovari(o)** → **ovary**

**perine(o)** → **perineum**

**salping(o)** → **fallopian tube**

**uter(o)** → **uterus**

**vagin(o)** → **vagina**

**vulv(o)** → **vulva**

# Combining Forms and Abbreviations

## Abbreviation

## Meaning

**AB** ..... **abortion**

**AFP** ..... **alpha-fetoprotein**

**AH** ..... **abdominal hysterectomy**

**CIS** ..... **carcinoma in situ**

**CS** ..... **cesarean section**

**C-section** ..... **cesarean section**

**CX** ..... **cervix**

# Combining Forms and Abbreviations

## Abbreviation

## Meaning

<b>D&amp;C</b>	<b>dilation and curettage</b>
<b>DES</b>	<b>diethylstilbestrol</b>
<b>DUB</b>	<b>dysfunctional uterine bleeding</b>
<b>ECC</b>	<b>endocervical curettage</b>
<b>EDC</b>	<b>expected date of confinement</b>
<b>EMB</b>	<b>endometrial biopsy</b>
<b>ERT</b>	<b>estrogen replacement therapy</b>

# Combining Forms and Abbreviations

## Abbreviation

## Meaning

<b>FHT</b> .....	<b>fetal heart tones</b>
<b>FSH</b> .....	<b>follicle-stimulating hormone</b>
<b>G</b> .....	<b>gravida (pregnancy)</b>
<b>gyn</b> .....	<b>gynecology</b>
<b>HCG</b> .....	<b>human chorionic gonadotropin</b>
<b>HRT</b> .....	<b>hormone replacement therapy</b>
<b>HSG</b> .....	<b>hystersalpingography</b>

# Combining Forms and Abbreviations

## Abbreviation

## Meaning

**HSO** → **hysterosalpingoophorectomy**

**IUD** → **intrauterine device**

**LH** → **luteinizing hormone**

**LMP** → **last menstrual period**

**multip** → **multiparous**

**OB** → **obstetrics**

**OCP** → **oral contraceptive pill**



# Combining Forms and Abbreviations

## Abbreviation

## Meaning

<b>P</b> .....	<b>para (live births)</b>
<b>Pap smear</b> .....	<b>papanicolaou smear</b>
<b>PID</b> .....	<b>pelvic inflammatory disease</b>
<b>PMP</b> .....	<b>previous menstrual period</b>
<b>PMS</b> .....	<b>premenstrual syndrome</b>

# Combining Forms and Abbreviations

## Abbreviation

## Meaning

**primip** → **primiparous**

**TAH-BSO** → **total abdominal hysterectomy  
with bilateral salpingo-  
oophorectomy**

**TSS** → **toxic shock syndrome**

**UC** → **uterine contractions**

# Diagnostic, Procedural, and Laboratory Terms

**Gynecologists** are physicians who diagnose and treat disorders of the female reproductive system.



An **obstetrician** diagnoses and treats both normal and abnormal pregnancies and childbirth.

# **Diagnostic, Procedural, and Laboratory Terms**

## **Examination of the Vagina and Cervix**

- **Papanicolaou Smear**

- gathers cells from the cervix to detect cervical and vaginal cancer
- speculum is used

- **Colposcopy**

- a lighted instrument used to examine the cervix and vagina

## **Other Examinations**

### **Hysteroscopy**

- use of a lighted instrument to examine the interior of the uterus

### **Culdoscopy**

- use of an endoscope to examine the contents of the pelvic cavity

# Diagnostic, Procedural, and Laboratory Terms



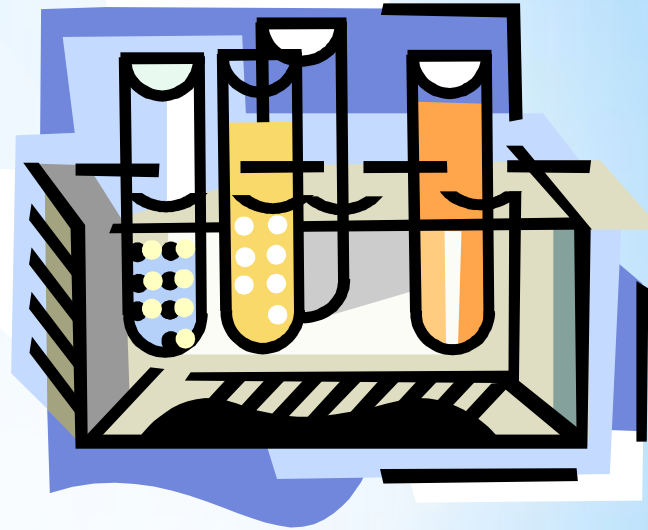
## Mammography

- X-ray of the breast, used to screen for breast cancer
- Recommended age differs based on family history, physical condition and the recommending body (AMA, ACS, and NIH)

# Diagnostic, Procedural, and Laboratory Terms

## Pregnancy Test

- A blood or urine test to detect **human chorionic gonadotropin (HCG)**.
- Also can be detected by palpation of the uterus during an internal examination by the gynecologist or obstetrician.



## Fertility Test

- **Hysterosalpingography** is an examination of the uterus and uterine tubes following the injection of a contrast medium.



# Pathological Terms

## Pathological Terms

**The premature end of a pregnancy is called *abortion*.**

### **Types of abortions**

- **Habitual abortion**
- **Spontaneous abortion**
- **Missed abortion**

### **Pregnancy Complications**

- **ectopic pregnancy**
- **abruptio placentae**
- **placenta previa**

- **preeclampsia**
- **Rh incompatibility**
- **breech presentation**



# Pathological Terms

## Pathological Terms

**Amenorrhea**

**Absence of menstruation**

**Dysmenorrhea**

**Painful cramping**

**Menstrual Abnormalities**

**Menorrhagia**

**Excessive menstrual bleeding**

**Oligomenorrhea**

**Scanty menstrual flow**

**Menometrorrhagia**

**Irregular and excessive bleeding during or between periods**

**Metrorrhagia**

**Bleeding between periods**



# Pathological Terms

## Pathological Terms

### **Inflammatory and Infectious Conditions**

**Cervicitis**

**Mastitis**

**Salpingitis**

**Vaginitis**

**Toxic Shock Syndrome**

**Pelvic Inflammatory Disease**

### **Sexually Transmitted Diseases**

• **Syphilis**

• **Gonorrhea**

• **Herpes II**

• **Human papilloma virus**

• **Chlamydia**

• **HIV/AIDS**

• **Trichomoniasis**

# Surgical Terms

## Surgical Procedures

- **Salpingotomy**
  - incision into one of the fallopian tubes
- **Tubal Ligation**
  - method of female sterilization
- **Cryosurgery**
  - using cold temperatures to destroy tissue
- **Cauterization**
  - using hot temperatures to destroy tissue

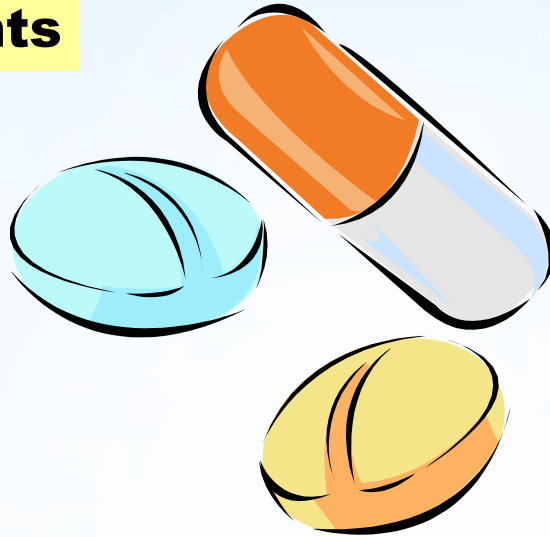
## Surgical Removal

- **Conization**
  - removal of a cone-shaped section of the cervix
- **Aspiration**
  - type of biopsy in which fluid is removed from the breast
- **Hysterectomy**
  - removal of the uterus
- **Myomectomy**
  - removal of fibroid tumors
- **Mastectomy**
  - removal of a breast

# ***Pharmacology***

## **Birth Control Agents**

- **Birth control pills**
- **Implants**
- **Abortifacients**



## **Hormonal Agents**

- **Hormone replacement therapy (HRT)**
- **Oxytocin**

**Note: A tocolytic agent stops labor contractions**

# Apply Your Knowledge

**Which of the following structures is responsible for releasing the mature ova during ovulation?**

**A. uterus**

**B. fallopian tubes**

**C. ovaries**

**Answer: C. ovaries**

# Apply Your Knowledge

**The uterus consists of three linings. Which lining is shed monthly during menstruation?**

**A. endometrium**

**B. perimetrium**

**C. myometrium**

**Answer: A. endometrium**

# Apply Your Knowledge

**Margaret is about to give birth to her third child. She has been pregnant four times. Which of the following would correctly describe her pregnancy history?**

**A. gravida 3 para 4**

**B. gravida 3 para 3**

**C. gravida 4 para 3**

**Answer: C. gravida 4 para 3**



# Apply Your Knowledge

**The presence of the HCG hormone in the blood or urine would indicate which of the following conditions?**

**A. cervical cancer**

**B. pregnancy**

**C. onset of menstruation**

**Answer: B. pregnancy**