

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**

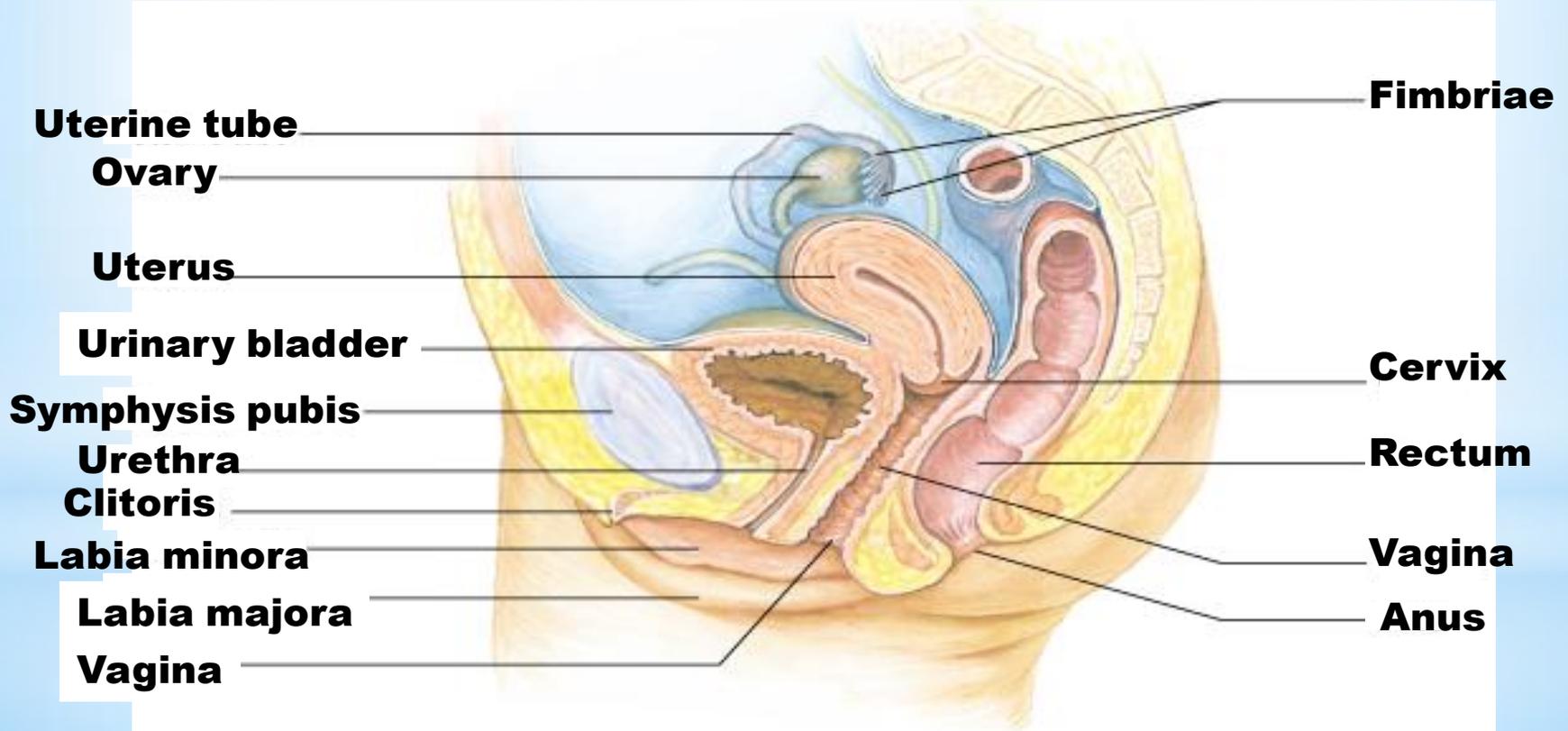
Objectives cont'd

- **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**

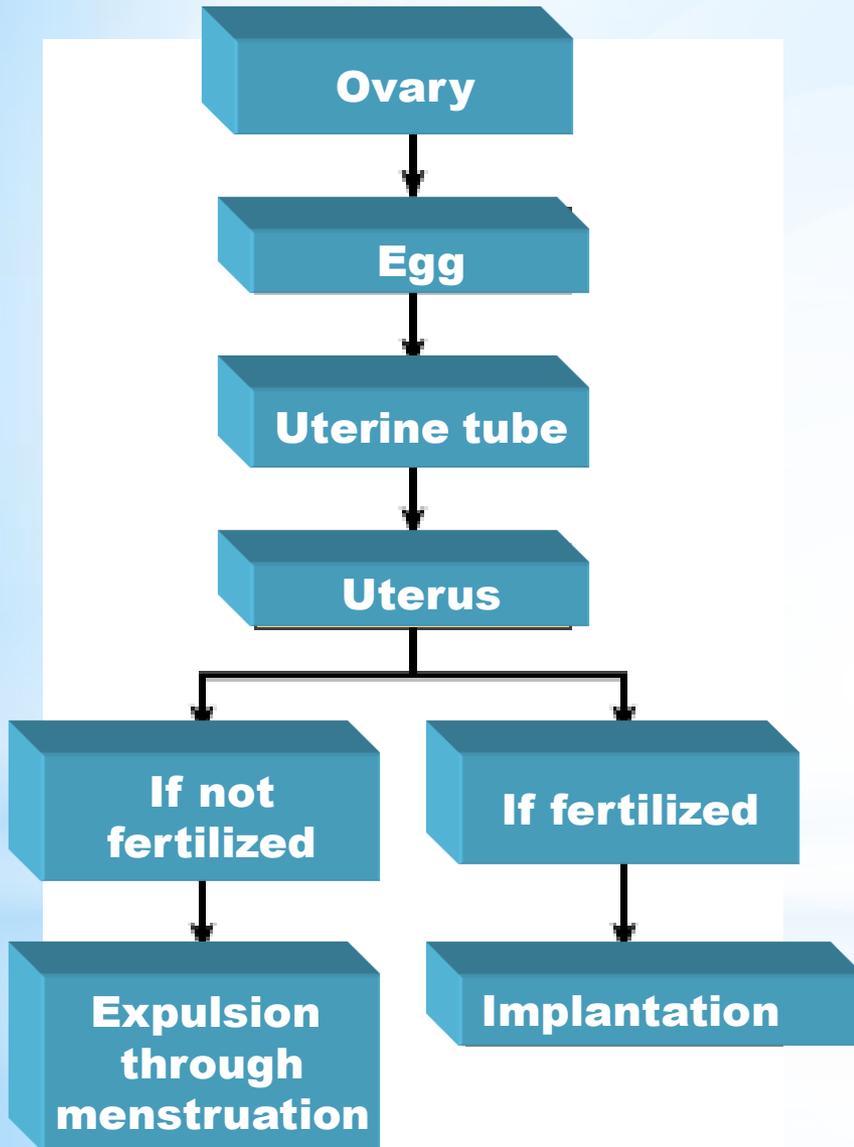
Structure and Function

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

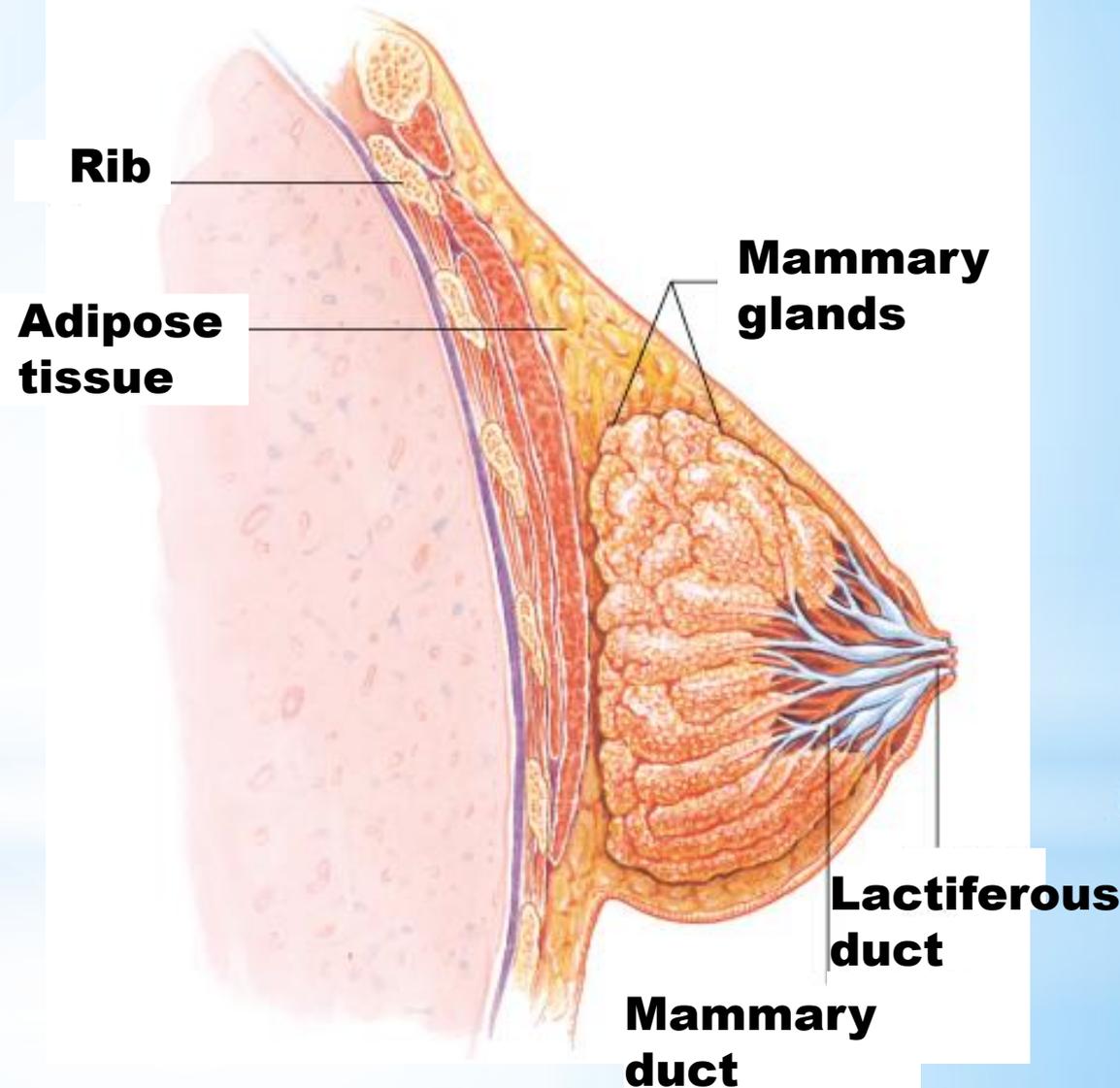
The Female Breast

- 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**)

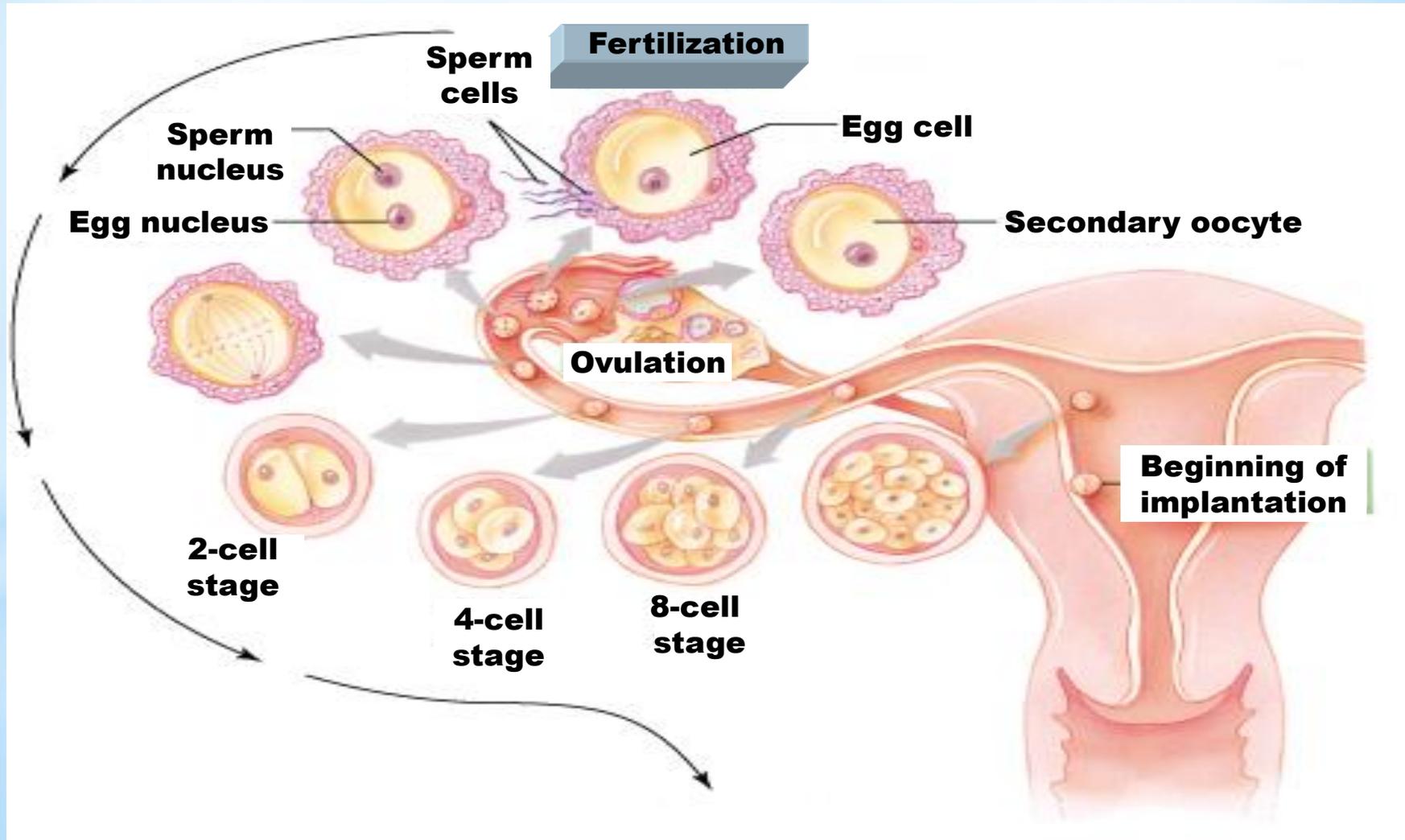
The ovum, fertilized or not, will end up in the uterus.

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

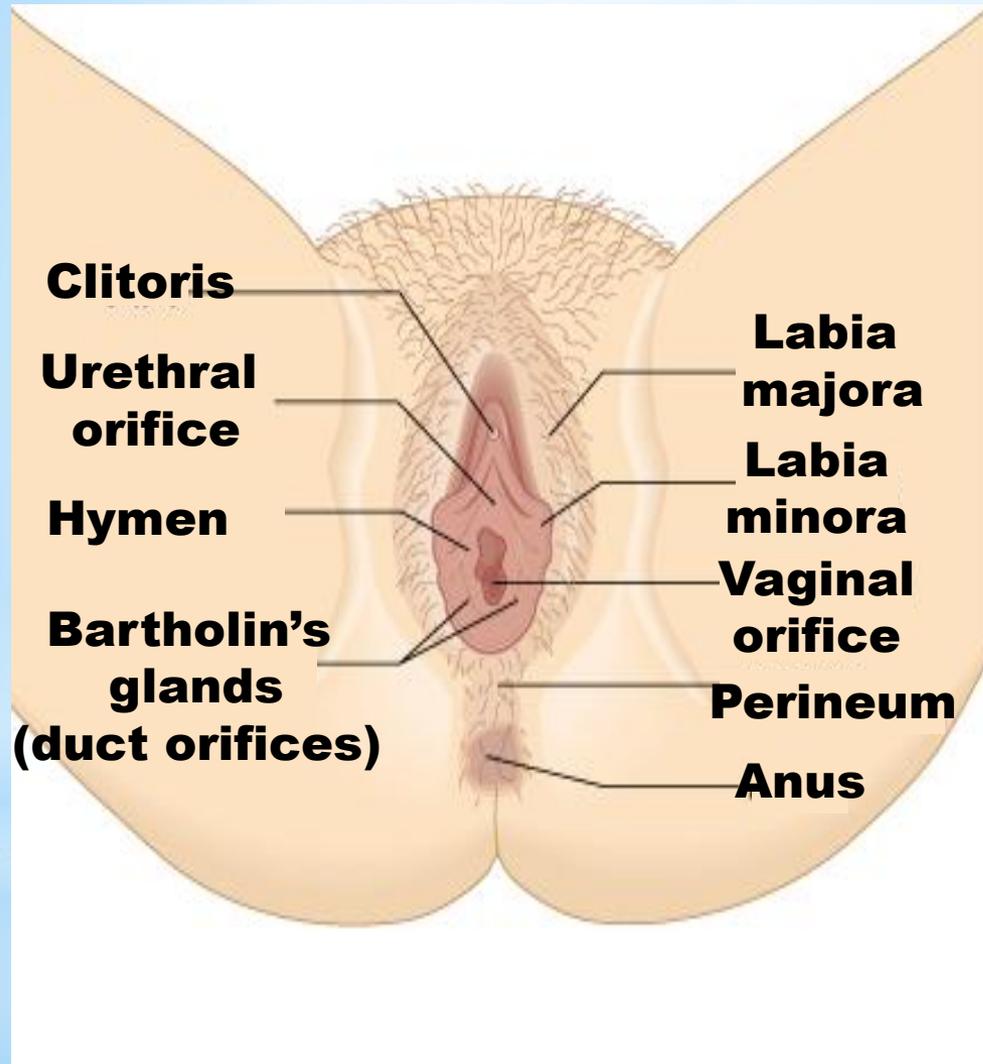
• If fertilization does occur, the ovum will attach to the endometrium where it will be nourished for the duration of gestation (about 40 weeks).

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

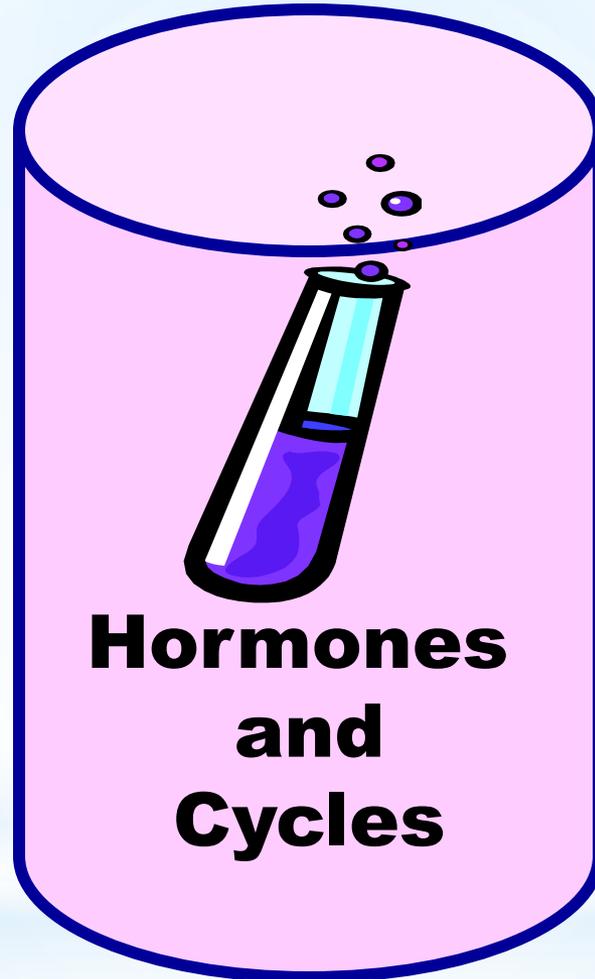
progesterone

prolactin

oxytocin

**Human
chorionic
gonadotropin
(HCG)**

**Luteinizing
hormone (LH)**

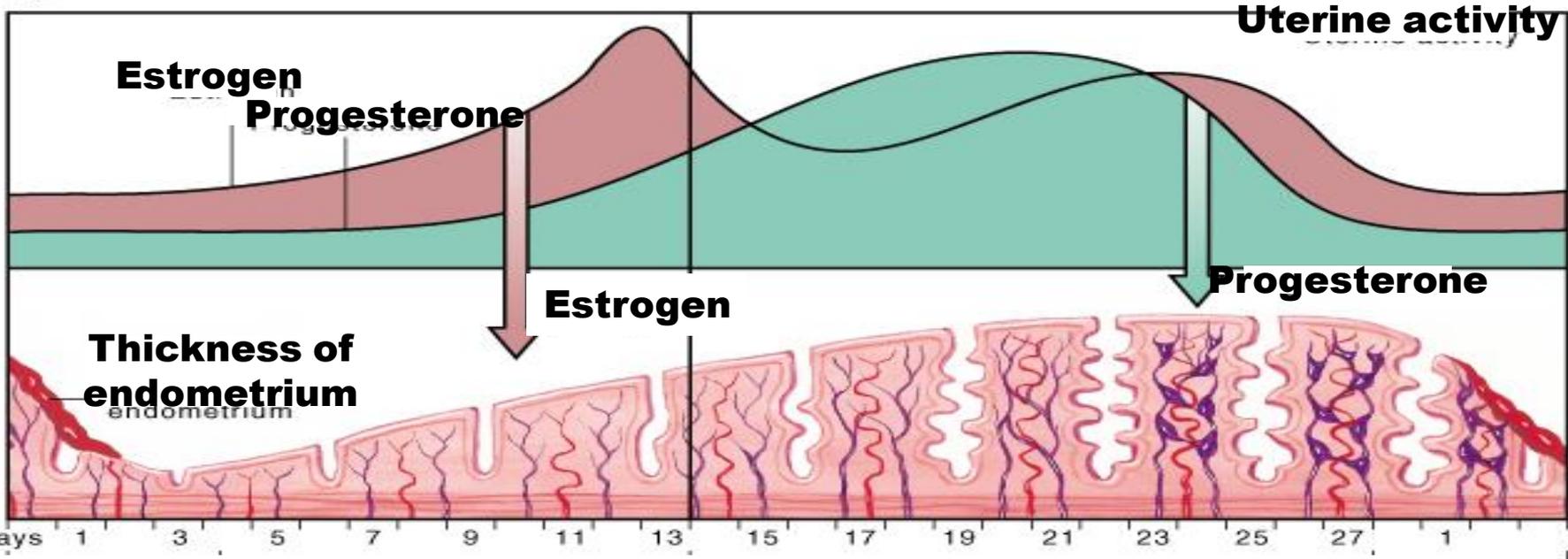
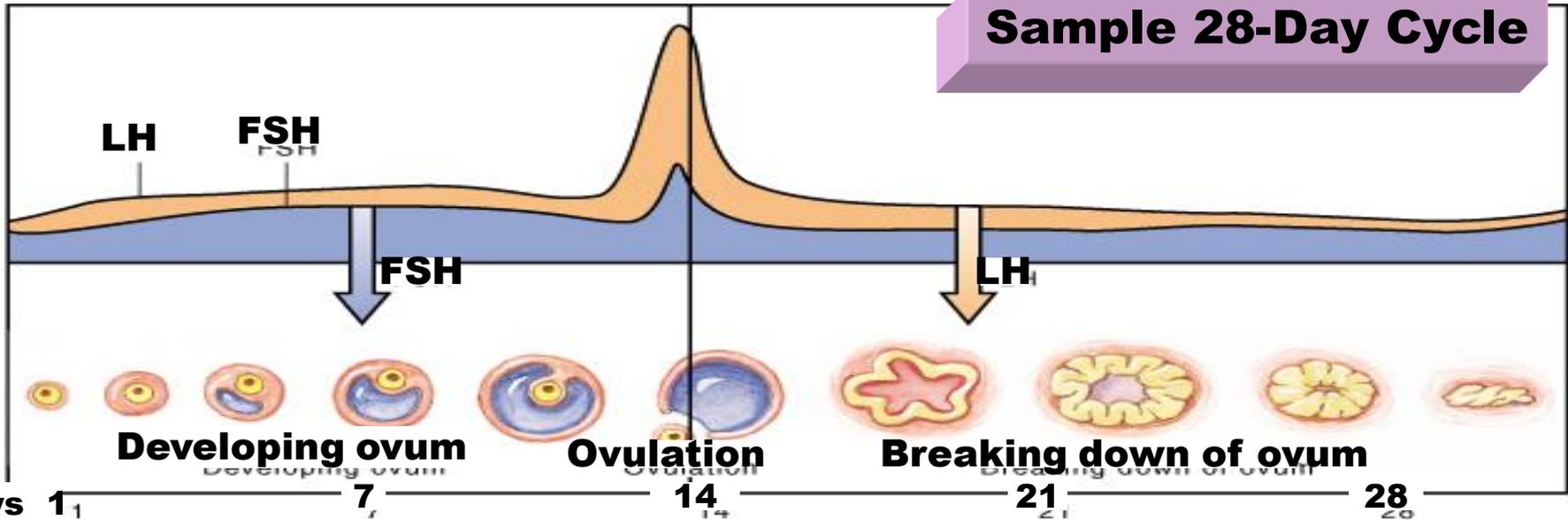


**Hormones
and
Cycles**

Follicle-stimulating hormone (FSH)

Structure and Function

Sample 28-Day Cycle



Menstruation Build-up to ovulation Ovulation Post-ovulation period Menstruation

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.



gravida

chorion

para

Pregnancy

umbilical cord

amniotic fluid

afterbirth

Combining Forms and Abbreviations

Combining Form

Meaning

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

Combining 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

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

Combining Forms and Abbreviations

Abbreviation

Meaning

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

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

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

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



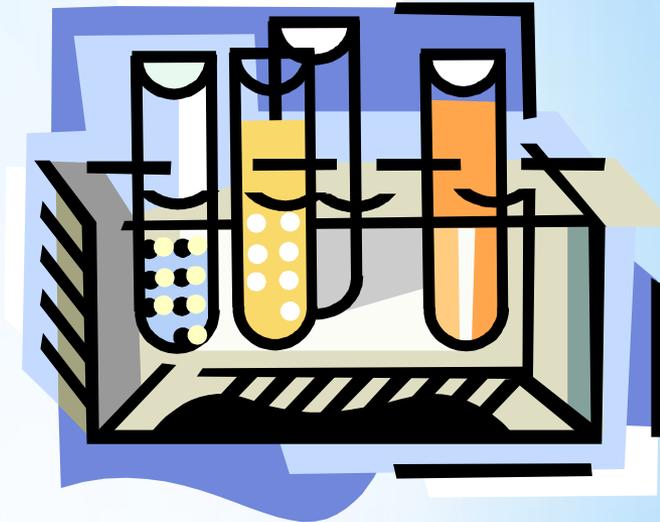
Mammography

- 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

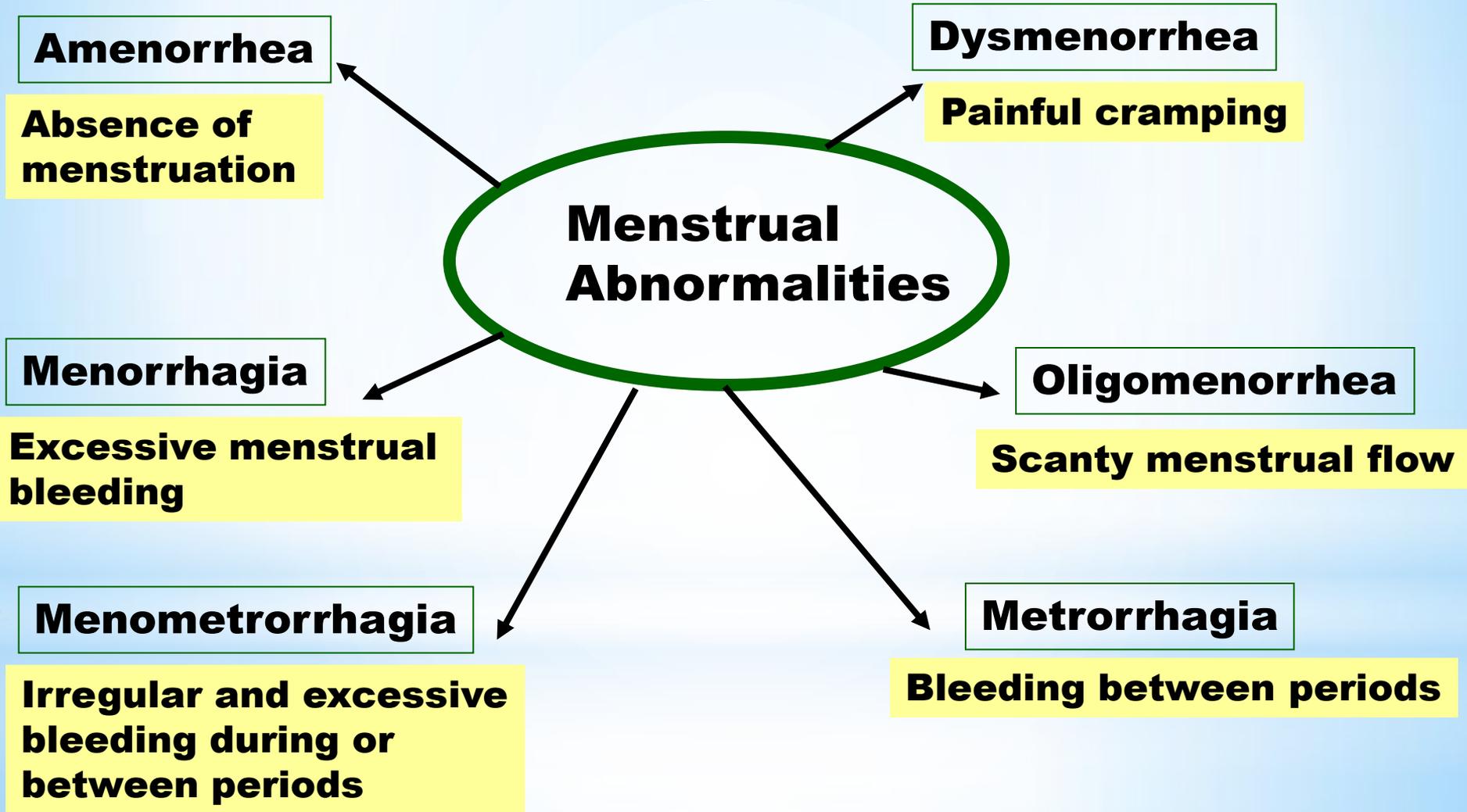
Pregnancy Complications

- ectopic pregnancy
- abruptio placentae
- placenta previa

- preeclampsia
- Rh incompatibility
- breech presentation

Pathological Terms

Pathological Terms



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