

Chapter 41

Genitourinary and Reproductive System Function and Assessment

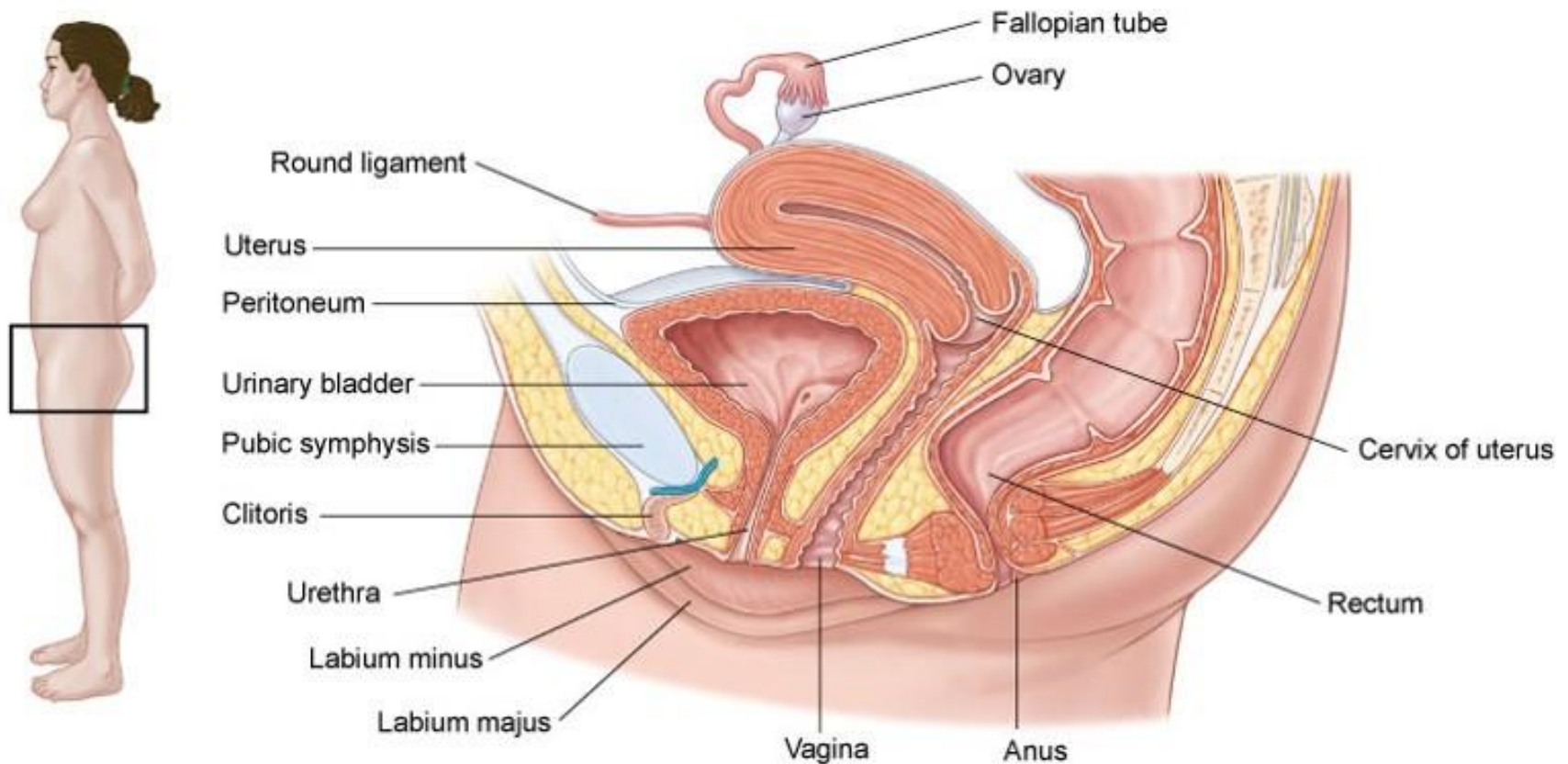
Learning Outcomes

- Explain the normal structures and functions of the reproductive system.
- Identify the effects of aging on the reproductive system.
- List data you should collect when caring for a patient with a disorder of the reproductive system.

Learning Outcomes (continued)

- Identify commonly performed tests used to diagnose disorders of the reproductive system.
- Plan nursing care for patients undergoing each of the diagnostic tests.

Review of Normal Anatomy & Physiology



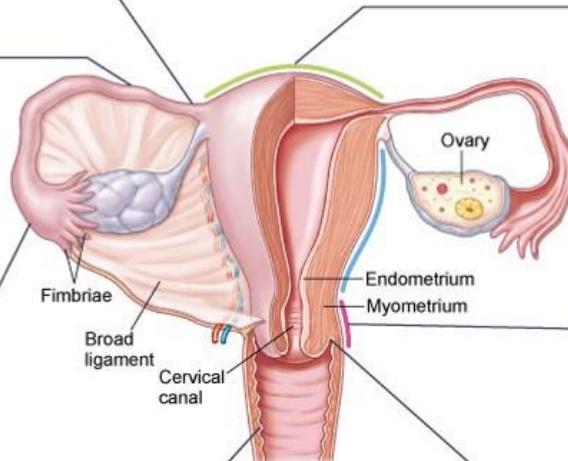
Review of Normal Anatomy & Physiology (continued_1)

Fallopian Tubes

A narrow **isthmus** is the portion of the fallopian tube closest to the uterus.

The middle portion of the tube, called the **ampulla**, is the usual site of egg fertilization. Cilia line the inside of the tube. Their beating movements, combined with peristaltic contractions of the tube, propel an egg toward the uterus.

The distal funnel-shaped end of the fallopian tube is called the **infundibulum**. The fallopian tube does not attach directly to the ovary. Instead, finger-like projections called **fimbriae** fan over the ovary.



Uterus

The curved upper portion of the uterus is called the **fundus**. The upper two corners of the uterus connect with the fallopian tubes.

The central region of the uterus is the **body**.

The inferior end is the **cervix**. A passageway through the cervix, called the **cervical canal**, links the uterus to the vagina. Glands within the cervical canal secrete thick mucus; during ovulation, the mucus thins to allow sperm to pass.

Vagina

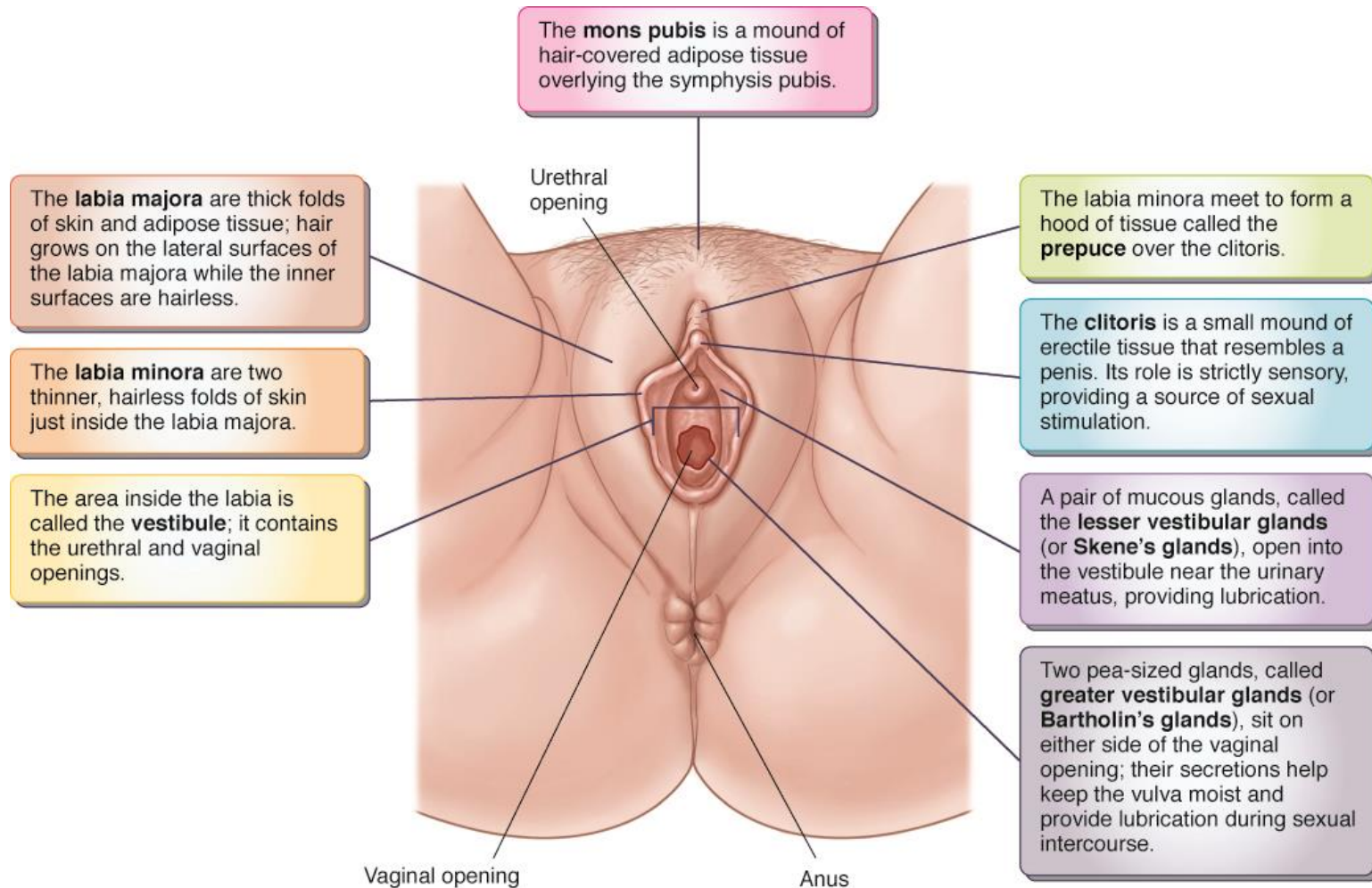
A muscular tube about 3 inches (8 cm) long, the **vagina** serves as a receptacle for the penis and sperm, a route for the discharge of menstrual blood, and the passageway for the birth of a baby. The smooth muscle walls of the vagina can expand greatly, such as during childbirth.

The lower end of the vagina contains ridges (**vaginal rugae**) that help stimulate the penis during intercourse and allow for expansion during childbirth.

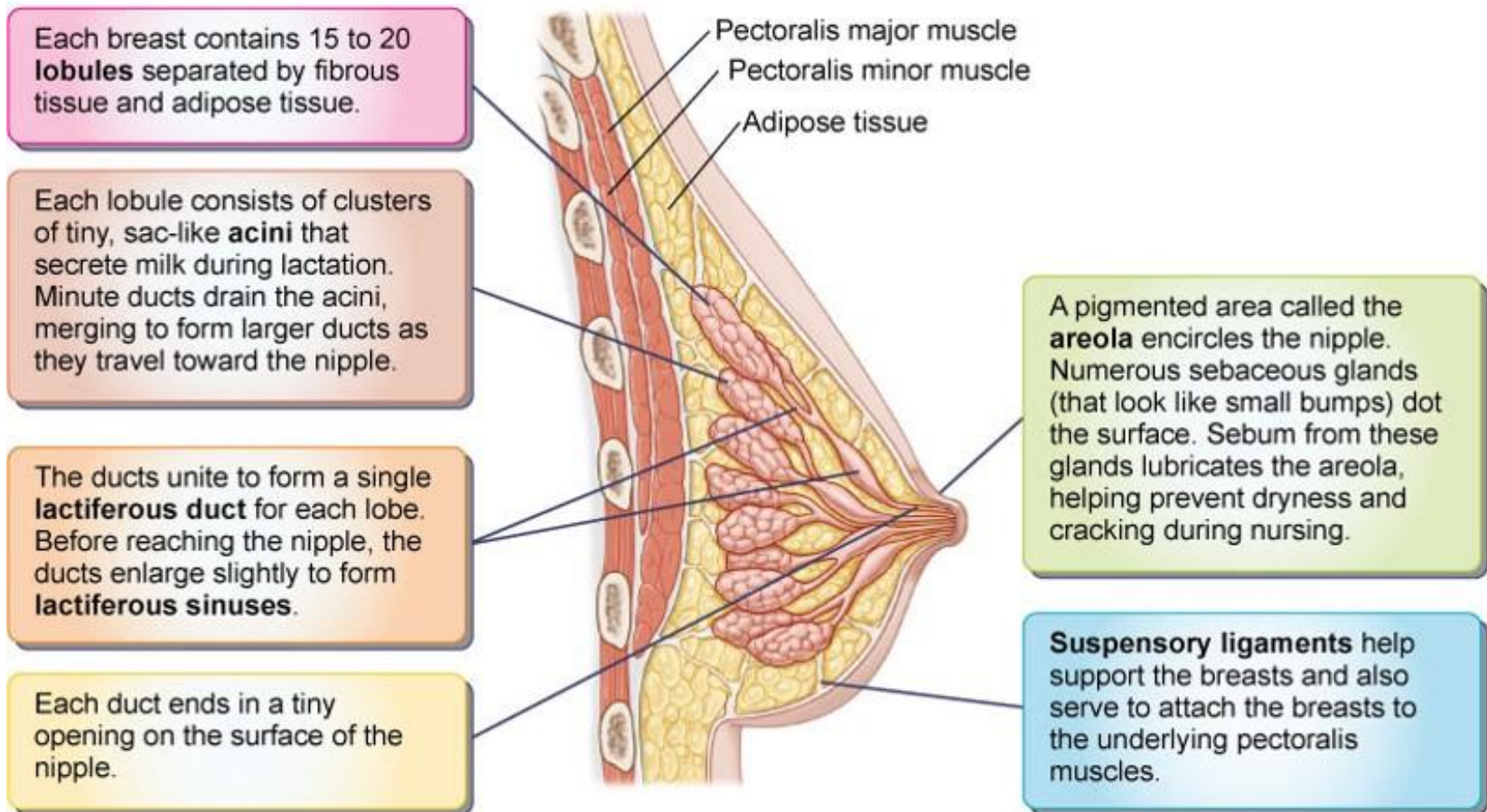
A fold of mucous membrane called the **hymen** partially covers the entrance to the vagina. During the first intercourse, the hymen ruptures, sometimes producing blood. However, a number of things can tear the hymen before that time, including the use of tampons, vigorous exercise, and medical examinations.

The vagina extends slightly beyond the cervix, creating pockets called **fornices**.

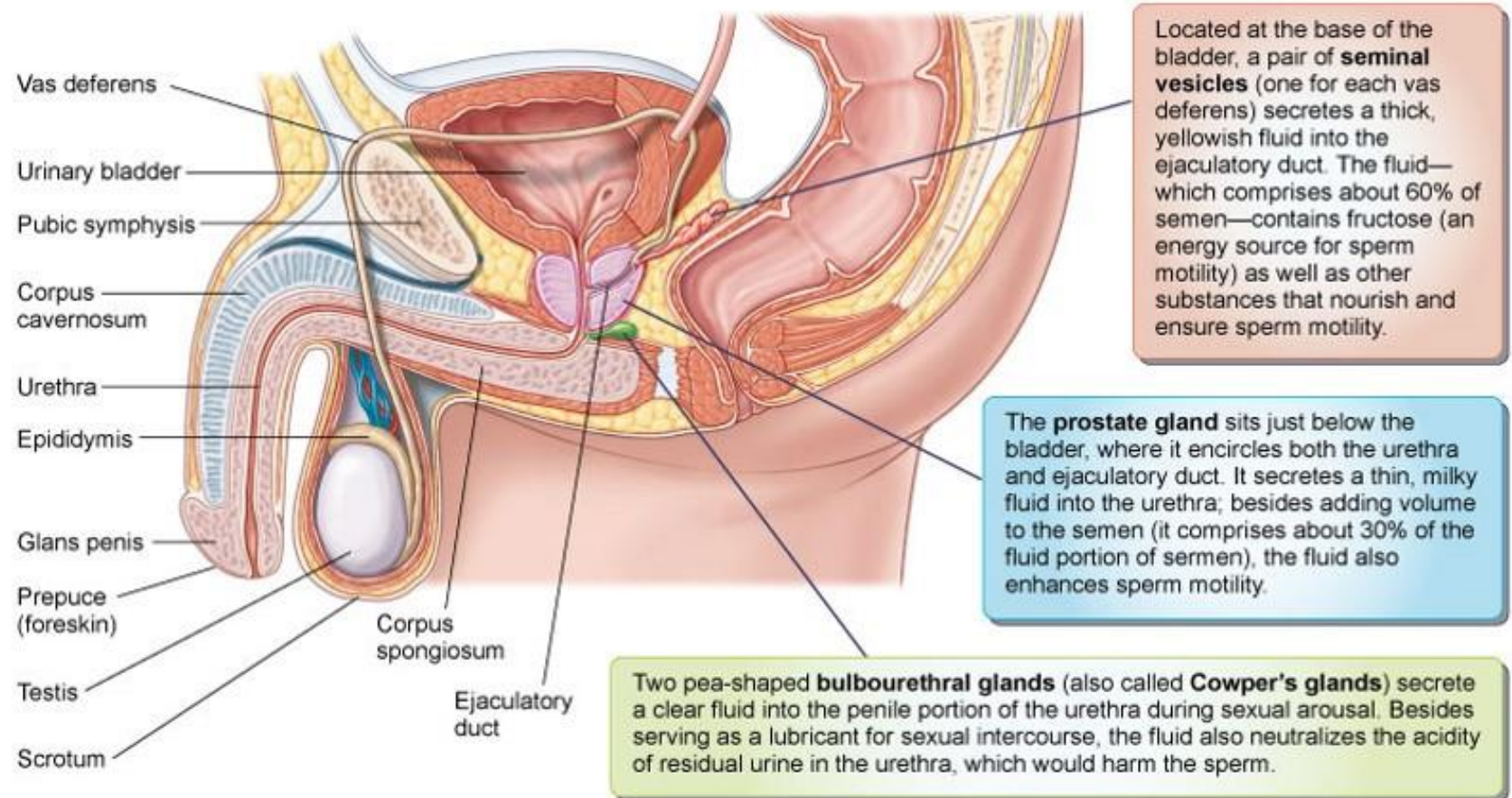
Review of Normal Anatomy & Physiology (continued_2)



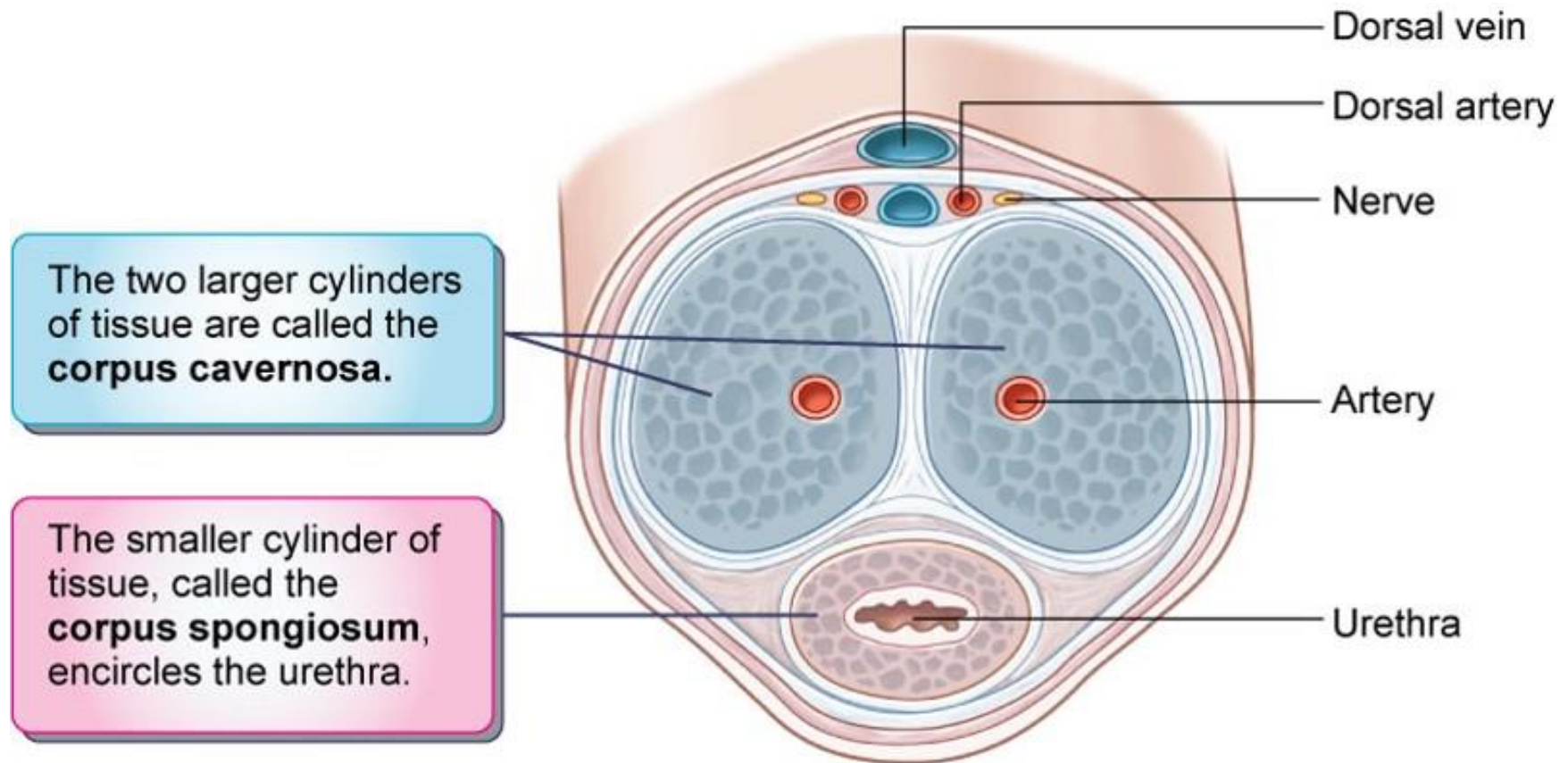
Review of Normal Anatomy & Physiology (continued_3)



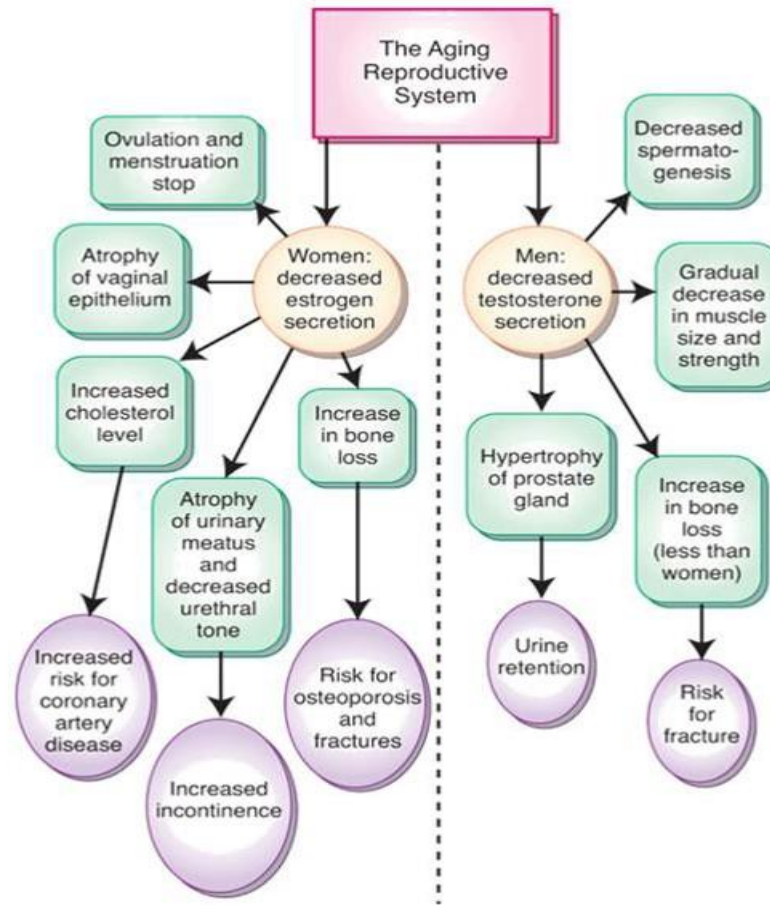
Review of Normal Anatomy & Physiology (continued_4)



Review of Normal Anatomy & Physiology (continued_5)



Effects of Aging



Subjective Female Assessment

- Personal
- Abuse
- Menstrual
- Obstetrical
- Gynecological
- Sexual
- Family
- Psychosocial
- Medications
- Treatments

Obstetrical History

- Gravida = number of pregnancies
- Para = number of births
- Abortions

Objective Female Assessment

- Genitalia
- Vagina
- Uterus/cervix
- Perineum
- Anus
- Inguinal nodes

Breast Assessment

- Clinical breast examination
- Breast self-examination (B S E)
- Ultrasound and mammography
- Thermography, tomography, magnetic resonance imaging (M R I)
- Biopsy

Breast Self-Examination



Inspection



BREAST SELF-EXAMINATION
Palpation

Mammography



American Cancer Society Recommendations (2017)

- Screening mammogram
 - Age 40 to 44 optional for annual screenings
 - Age 45 to 54 annually
 - Age 55 and older may switch to every other year or continue annually
- Optional B S E; women should be familiar with how their breasts look and feel.
- M R I and mammogram every year for women at high risk of breast cancer.

Bone Health Assessment

- Age
- Menopause
- Diet
 - Calcium
 - Vitamin D
- Bone density
 - Dual energy x-ray absorptiometry (D E X A) scan
 - Quantitative computed tomography (Q C T) scan
 - Peripheral testing

Additional Tests for Females

- Hormone levels
- Swabs and smears
- Biopsy, cytology
- Radiography
- Sonography
- Thermography
- Computed tomography (C T) scan
- M R I
- Endoscopy
 - Salpingoscopy
 - Hysteroscopy
 - Colposcopy
 - Culdoscopy

Pelvic Examination/Pap Smear

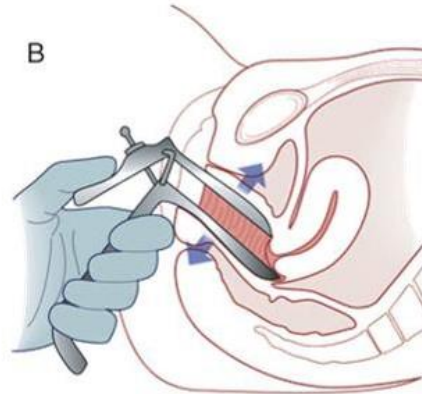
- Prepare supplies.
- Explain procedure.
- Have patient empty bladder.
- Assist with positioning.

Pelvic Examination/Pap Smear (continued)

A



B



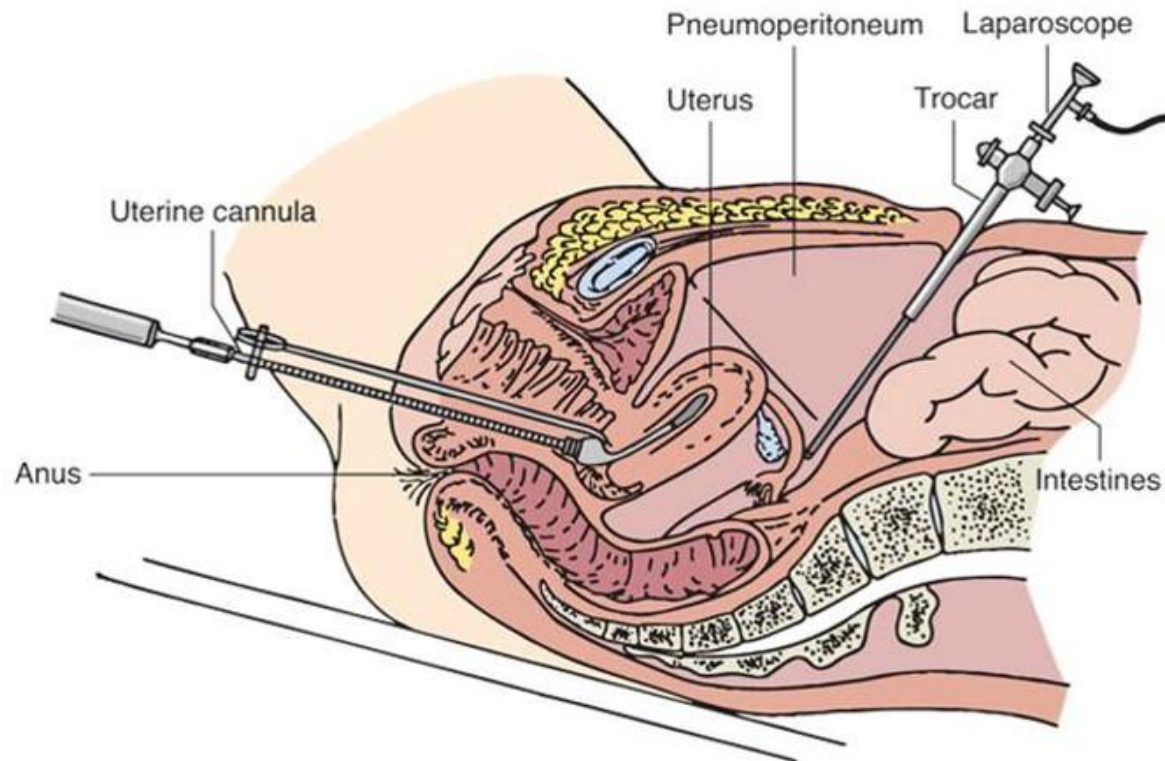
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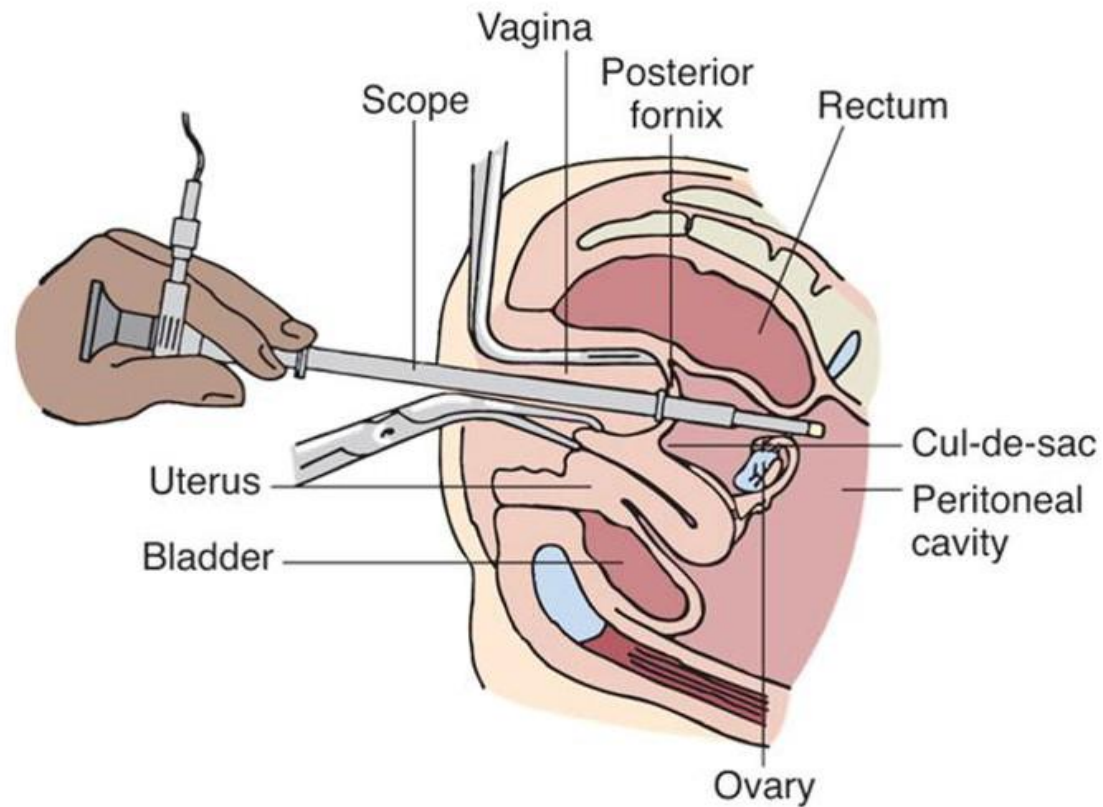
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Laparoscopy



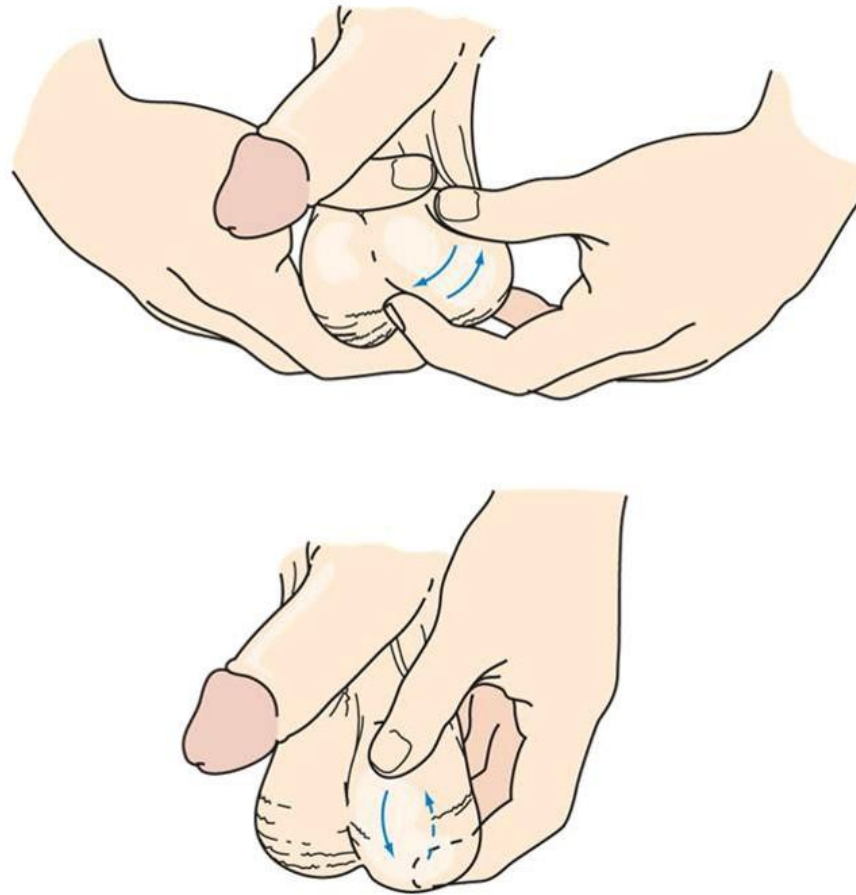
Culdoscopy



Subjective Male Assessment

- History
 - Medication use
 - Family history
 - Personal habits
 - Health promotion
 - Mental health
- Circulatory
- Respiratory
- Gastrointestinal
- Musculoskeletal
- Neurological
- Metabolic/endocrine
- Genitourinary
- Sexual practices

Testicular Self-Examination



Physical Examination

- Clinical breast examination
- Penis glans and shaft
- Scrotum
- Testes
- Spermatic cord
- Inguinal ring and lymph nodes
- Digital rectal examination

Diagnostic Tests

- Ultrasound
- Cystourethrography
- Laboratory tests
 - Prostate-specific antigen (P S A)
 - Prostatic acid phosphatase (P A P)
 - Fertility tests
 - Hormone levels

Review Question

How would the nurse document the reproductive history of a woman who has had three pregnancies, one set of twins, and two abortions?

1. P3B2A2
2. G3P2A2
3. G3P1A2
4. P3G1AB2

Review Question Answer

Correct Answer: **3**

Review Question (continued_1)

According to the American Cancer Society, which women should have a mammogram?

1. Only women at high risk for breast cancer
2. All women starting at age 20
3. Women age 45 to 54 annually
4. Women age 30 and older every 3 years

Review Question Answer (continued_1)

Correct Answer: **3**

Review Question (continued_2)

Which men should do testicular self-examination?

1. All men after puberty
2. All men after age 21
3. Only men at high risk for cancer
4. Only men with a history of cancer

Review Question Answer (continued_2)

Correct Answer: **1**

Review Question (continued_3)

What disorders are evaluated with digital rectal examination?

1. Prostate disorders
2. Penile disorders
3. Colon disorders
4. Testicular disorders

Review Question Answer (continued_3)

Correct Answer: **1**

Review Question (continued_4)

A postmenopausal woman asks if she should take calcium and vitamin D supplements. After advising her to talk with her health care provider, what is the best response by the nurse?

1. “No, you should get calcium and vitamin D from foods.”
2. “Yes, you should get 1,200 milligram of calcium and 600 I U of vitamin D supplements daily.”
3. “You should get your vitamin D from food, but should consider a calcium supplement.”
4. “You should reduce your intake of calcium and vitamin D as you age.”

Review Question Answer (continued_4)

Correct Answer: **1**