

CHAPTER  
**39**

Assisting in  
Reproductive and  
Urinary Specialties

# Learning Outcomes (cont.)

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- 39.1 Carry out the role of the medical assistant in the medical specialty of gynecology.
- 39.2 Carry out the role of the medical assistant in the medical specialty of obstetrics.
- 39.3 Identify diagnostic and therapeutic procedures performed in obstetrics and gynecology.

# Learning Outcomes (cont.)

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- 39.4 Relate the role of medical assisting to the medical specialty of urology.
- 39.5 Identify diagnostic tests and procedures performed in urology.
- 39.6 Recognize diseases and disorders of the reproductive and urinary systems.

# Introduction

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- Obstetrics – pregnancy
- Gynecology – female reproductive system
- Urology
  - Male and female urinary systems
  - Male reproductive system
- Medical assistant
  - Understanding of disorders, tests, and treatments
  - Assist licensed practitioners

# Assisting with the Gynecologic Patient

- **Menstruation**
  - Normal cycle of preparation for conception
  - **Menarche** – onset
  - Periods
    - Monthly
    - 3-7 days
  - Hormonal changes



# Menopause

- Cessation of the menstrual cycle
  - Natural ~ between ages 45 and 55
  - Surgical
  
- Stages
  - Premenopause
  - Perimenopause



# The Gynecologic Exam

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- Purpose
  - Overview of a woman's health
  - Cancer-screening exams and tests
- Female assistant should be present during the exam
  - To assist the doctor
  - To provide legal protection

# The Gynecologic Exam (cont.)

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- Medical assistant role
  - Have patient empty bladder
  - Provide a gown
  - Interview patient and check vital signs
  - Observe for problems
  - Determine the 1<sup>st</sup> day of her **last menstrual period (LMP)**



# The Gynecologic Exam (cont.)

- Physician's interview
  - Evaluation of total health
  - Review of factors that may indicate cancer or sexually transmitted infections (STIs)



# Breast Exam

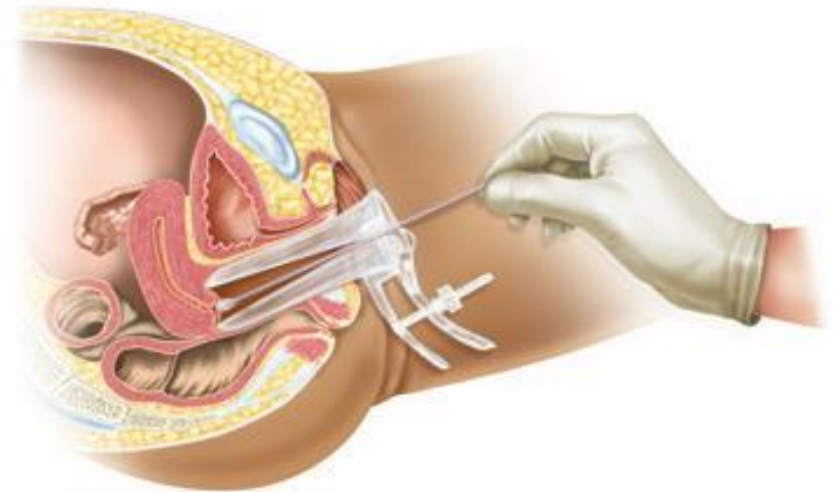
- Check for abnormal lumps
- Breast cancer detection guidelines
  - Mammograms
  - Annual breast exam
  - Know normal appearance and feel
  - MRI with family history



# Pelvic Exam

- Inspection
  - External genitalia
  - Vagina and cervix ~  
**speculum**
- Palpation – bimanual
  - Vagina and abdomen
  - Rectum and abdomen

- Tests
  - Pap smear
  - KOH
  - Wet mount



# Pelvic Exam

- Medical assistant's role
  - Assist the patient into position
  - Drape patient
  - Assist the licensed practitioner
    - Gloves and instruments
    - Lubricant
    - Testing materials





# Apply Your Knowledge

When assisting with a gynecologic exam what would be your duties?

## ANSWER:

# CORRECT!

- Have patient empty bladder
- Provide a gown
- Interview patient and check vital signs
- Observe for problems
- Determine the 1<sup>st</sup> day of her LMP
- Assist into correct position and provide a drape
- Assist the licensed practitioner
- Prepare instruments and testing materials
- Patient teaching

# Assisting with the Obstetrical Patient

- Nägele's rule
  - Estimate of delivery date
  - Subtract 3 months from first day of last period and add 7 days plus one year



# Prenatal Care

- During pregnancy
  - Eat well and exercise
  - Keep medical appoints
  - Attend childbirth classes
  - Avoid
    - Tobacco
    - Alcohol
    - Drugs



# Prenatal Care (cont.)

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- Normal changes
  - Morning sickness
  - Weight gain
  - Urinary frequency
  - Depression
  - Constipation
  - Swollen hands and feet



# Prenatal Care (cont.)

- Frequency of prenatal appointments
- Medical assistant role
  - Assist with routine tests
  - Assist with prenatal exams
  - Patient teaching and support



# Prenatal Care by the Licensed Practitioner

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- Monitors
  - Blood pressure
  - Weight gain
  - Urine for protein
- Prescribes vitamins and iron
- Observes for
  - Placenta previa
  - Abruptio placenta
  - Gestational diabetes

# Labor

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- Patient instructions – when to go to the hospital
  - Regular contractions ~ 6 or more per hour for at least two hours
  - If her “water breaks” ~ sign of impending labor



# Delivery

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- Delivery
  - Natural
  - Following **induction**
  - Cesarean section
- Clamps, ties, cuts umbilical cord
- Presents infant to mother

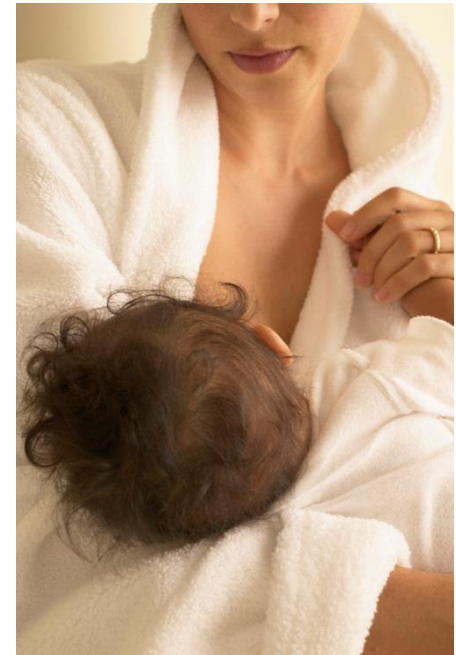
# Delivery

- Medical assistant
  - Schedule induction
  - Schedule C-section
  - Assist with emergency delivery



# Assisting with the Obstetrical Patient (cont.)

- Breastfeeding
  - Colostrum ~ immunity
  - Economical and convenient
  - Patient instruction
  - Refer to community resources



# Assisting with the Obstetrical Patient (cont.)

- Bottle feeding
  - Acceptable alternative
  - Formula
  - Patient instructions
    - Type of formula
    - Preparation
    - Avoid cow's milk

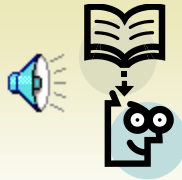


# Postpartum

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- Return to normal state
  - Uterus shrinking
  - Difficulty with urination and bowel movements
  - Postpartum bleeding
  - Emotional stress
- Medical assistant
  - Ask questions, educate, and document
  - Assist with exams





# Apply Your Knowledge

A patient has just found out she is pregnant. Her last period started on January 23<sup>rd</sup>. Using Nägele's rule, what day would be her estimated date of delivery?

**ANSWER:** Nägele's rule says count back three months [1-December, 2-November, 3-October], then add seven days plus 1 year, [ $23 + 7 = 30$ ].

Her estimated date of delivery would be October 30<sup>th</sup>.

**Right!**

# OB/GYN Diagnostic and Therapeutic Tests and Procedures

- Pregnancy tests
  - Detect presence of HCG
  - Blood or first voided urine



# OB/GYN Diagnostic and Therapeutic Tests and Procedures

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- Tests for STIs
  - Bacterial and tissue cultures
  - Examining lesions
  - Blood tests
  - Patient's history
- Written consent to release results
- Reporting STIs to the state

# Radiologic Tests

- X-rays – avoid if pregnant
- Ultrasonography, CT scan, MRI
- Hysterosalpingography
- Mammogram
- Medical assistant
  - Schedule appointment
  - Patient instructions



# Fetal Screening

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- Routine or for at-risk pregnancies
- Alpha fetoprotein – abnormalities indicate neural tube defect
- Ultrasound
  - Cysts, tumors, or obstructions
  - Fetal size and position
  - Guide for amniocentesis or chorionic villus sampling

# Invasive Procedures

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- Pap smear – presence of abnormal or precancerous cells
- Amniocentesis – genetic or metabolic problem with the fetus
- Chorionic Villus Sampling – genetic disorders

# Invasive Procedures (cont.)

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- Biopsy
  - Surgical removal of tissue
  - Diagnose cancers
  - Medical assistant
    - Patient education
    - Assist with procedure

# Invasive Procedures (cont.)

## Colposcopy

- Examination of vagina and cervix to identify abnormal cells
- D and C ~ dilation of the cervix and scraping the uterine lining





# Diagnostic Tests and Procedures (cont.)

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- Stereotactic Core Biopsy
  - Obtain tissue sample
  - Uses three-dimensional coordinates
- Hysterectomy
  - Removal of the uterus
  - Hysterosalpingectomy ~ uterus and fallopian tubes
  - Hysterosalpingo-oophorectomy ~ uterus, fallopian tubes, and ovaries

# Diagnostic Tests and Procedures (cont.)

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- Laparoscopy – view internal organs
- **Loop Electrosurgical Excision Procedure (LEEP)**
  - Removal of abnormal cervical tissue
  - Done as part of a colposcopy
- Cryosurgery – freezing abnormal tissue

# Apply Your Knowledge



A 38-year-old pregnant patient may be carrying twins. What diagnostic test(s) may be performed and why?

**ANSWER: Ultrasound to determine fetal size, position, and number of fetuses.**

**Very Good!**

# Assisting in Urology

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- Urologist
  - Diagnoses and treats urological disorders and diseases
  - Male and female urinary system
  - Male reproductive system
- Medical assistant
  - Assists with general exams
  - Collects and processes urine and blood
  - Patient education

# Assisting in Urology (cont.)

- History
  - Changed in urination
  - Dysuria
  - Incontinence



# Assisting in Urology (cont.)

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- Exam
  - Palpation of kidneys and bladder
  - Inspection of external genitalia
  - In males
    - Palpation of penis and scrotum
    - Exam of prostate gland
- Patient instruction – testicular self-exam

# Urology Examinations

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- Thorough history
  - Frequency or urgency of urination
  - Difficulty or pain
  - Incontinence
  
- Palpation – kidneys and bladder

# Urology Examinations

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- Inspection – external genitalia
- Male reproductive system
  - Inspection
  - Palpation
  - Testicular self-exam





# Apply Your Knowledge

When obtaining the patient's history as part of an urologic exam, what information do you need to obtain?

**ANSWER** If the patient has had changes in urination, painful urination or incontinence.

**SUPER!**

# Urological Diagnostic Tests and Procedures

- Imaging techniques
  - CT scan or MRI
  - Pyelography
- Urine and blood tests
- Semen analysis and smears
  - Determine fertility
  - Evaluate success of a **vasectomy**



# Urological Diagnostic Tests and Procedures

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- Cystometry – bladder capacity and pressure
- Cystoscopy – inspection of the bladder and urethra walls
- Testicular biopsy – tissue sampling

# Apply Your Knowledge



The physician has written an order for pyelography for a patient. What will this involve?

**ANSWER: The patient will have an X-ray of the kidney area with an iodine-based contrast agent.**

# Nice Job!

# Diseases and Disorders of the Reproductive System

Condition	Description
Cancer	Common occurrence in cervix, endometrium, ovaries; cells divide uncontrollably, eventually forming tumor or other growth of abnormal tissue
Ectopic pregnancy	Fertilized egg unable to move out of fallopian tube into uterus for implantation

# Diseases and Disorders of the Reproductive System

Condition	Description
Endometriosis	Endometrial tissue present outside uterus, usually in pelvic area; not life-threatening but may cause sterility
Fibroids, or leiomyomas	Common, benign, smooth tumors of muscle cells grouped in uterus
Fibrocystic breast disease	Benign, fluid-filled cysts or nodules in breast

# Diseases and Disorders of the Reproductive System (cont.)

Condition	Description
Menstrual disturbances	<b>Amenorrhea, dysmenorrhea, menorrhagia, or metrorrhagia</b>
Ovarian cysts	Sacs of fluid or semisolid material; usually benign
Pelvic inflammatory disease (PID)	Acute or chronic infection of the reproductive tract; causes include STDs or other organism

# Diseases and Disorders of the Reproductive System (cont.)

Condition	Description
Pelvic support problems	Abnormal weakening of vaginal tissue, unusual increase in abdominal pressure, congenital weakening
Polyps	Red, soft, and fragile growths, with slender stem attachment on mucous membranes of cervix or endometrium



# Diseases and Disorders of the Reproductive System (cont.)

Condition	Description
Premenstrual dysphoric disorder (PMDD)	Severe premenstrual syndrome affecting 5% of women; symptoms have disrupting effect on patient's life
Premenstrual syndrome (PMS)	Symptoms include swelling, bloating, weight gain, breast tenderness, headaches, and mood shifts 1 week to 10 days before menstruation

# Diseases and Disorders of the Reproductive System (cont.)

Condition	Description
Sexual dysfunction disorders	Interruption or lack of sexual response cycle; unhealthy view of one's feelings about oneself and feelings toward sex
Vaginitis	Inflammation of vagina caused by bacteria, viruses, yeasts, or chemicals in sprays, douches, or tampons

# Diseases and Disorders of the Urinary System

Condition	Description
Epididymitis	Bacterial infection of the epididymis
Hydrocele	Excess fluid in the scrotum; usually caused by an infection of the epididymis or testes
Impotence	Inability to achieve or to maintain an erection; cause may be physical, a side effect of medication or psychological or emotional

# Diseases and Disorders of the Urinary System

Condition	Description
Incontinence	Loss of bladder control; causes include weak muscles or muscles that are too active
Kidney Stones	Chemical substances in the urine form crystals in the kidney, ureter, or bladder
Prostatic hypertrophy	Enlargement of the prostate gland; common in men over 50; constricts the urethra

# Diseases and Disorders of the Urinary System (cont.)

Condition	Description
Prostatitis	Inflammation of the prostate; usually bacterial
Prostate cancer	Most common cancer in men; usually symptomless; PSA used for screening
Urethritis	Inflammation of the urethra; usually bacterial

# Sexually Transmitted Infections

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- Acquired through sexual contact
- Patient education important
  - Sensitive topic ~ ensure patient privacy
  - Complete course of therapy
  - Avoid sexual contact
  - Sexual partners must be treated



# Apply Your Knowledge

Matching:

**ANSWER:**

B common, benign, tumors in the uterus

E absence of menstruation

A acute or chronic infection of the reproductive tract

F excess fluid in the scrotum

C loss of bladder control

D crystals in the kidney, ureter, or bladder

A. PID

B. Fibroids

C. Incontinence

D. Kidney stones

E. Amenorrhea

F. Hydrocele

**YES!**

# In Summary

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- 39.1 Medical assistants assist with gynecological exams, provide patient teaching for OB/GYN and breast health issues, and must handle cervical and other specimens correctly.
- 39.2 Medical assistants assist with examinations for pregnant females, providing for their needs, and provide education for the pregnant patient and new mother



# In Summary (cont.)

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- 39.3 Diagnostic and therapeutic procedures performed in OB/GYN include pregnancy tests, tests for STIs, radiologic tests such as mammograms, fetal screening, Pap smears, D&C, and fine-needle aspiration.
- 39.4 Medical assistants assist with urological exams and diagnostic tests. Patient education for urologic patients regarding TSE and other information are also duties of a medical assistant working in urology

# In Summary (cont.)

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- 39.5 Various urologic diagnostic tests and procedures are performed, including semen analysis, cystometry, cystoscopy, and testicular biopsy.
- 39.6 Diseases and disorders of the reproductive and urinary systems are listed for review in Table 39-4 Common Obstetric and Gynecologic Diseases and Disorders and Table 39-5 Common Urologic Diseases and Disorders

# End of Chapter 39

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If pregnancy were a  
book they would  
cut the last two  
chapters.

~ Nora Ephron