Chapter 24

Gynecologic Emergencies

Unit Summary

After students complete this chapter and the related course work, they will understand the anatomy and physiology, including the developmental changes during puberty and menopause, of the female reproductive system and identify and describe assessment and treatment for gynecologic emergencies. Special considerations and precautions that an EMT must observe when arriving at the scene of a suspected case of sexual assault or rape are also discussed.

National EMS Education Standard Competencies

Medicine

Applies fundamental knowledge to provide basic emergency care and transportation based on assessment findings for an acutely ill patient.

Gynecology

• Recognition and management of shock associated with

* + Vaginal bleeding (pp 885–889)

• Anatomy, physiology, assessment findings, and management of

* + Vaginal bleeding (pp 882–883, 885–889)
  + Sexual assault (to include appropriate emotional support) (pp 890–893)
  + Infections (pp 882–890)

Knowledge Objectives

1. Describe the anatomy and physiology of the female reproductive system; include the developmental changes that occur during puberty and menopause. (pp 882–883)

2. Discuss the special, age-related patient management considerations EMTs should provide for both younger and older female patients who are experiencing gynecologic emergencies. (p 883–884)

3. List three common examples of gynecologic emergencies; include the causes, risk factors, assessment findings, and patient management considerations. (pp 884–886)

4. Explain how an EMT would recognize conditions associated with hemorrhage during pregnancy. (p 885–886)

5. Discuss the assessment and management of a patient who is experiencing a gynecologic emergency; include a discussion of specific assessment findings. (pp 886–889)

6. Explain the general management of a gynecologic emergency in relation to patient privacy and communication. (pp 886–889)

7. Give examples of the personal protective equipment EMTs should use when treating patients with gynecologic emergencies. (p 889)

8. Discuss the special considerations and precautions EMTs must observe when arriving at the scene of a suspected case of sexual assault or rape. (pp 890–892)

9. Discuss the assessment and management of a patient who has been sexually assaulted or raped; include the additional steps EMTs must take on behalf of the patient. (pp 890–893)

Skills Objectives

There are no skills objectives for this chapter.

Readings and Preparation

Review all instructional materials including ***Emergency Care and Transportation of the Sick and Injured*, Twelfth Edition**, Chapter 24, and all related presentation support materials.

• Access local protocols on the treatment of sexual assault patients.

Support Materials

• Lecture PowerPoint presentation

• Case Study PowerPoint presentation

Enhancements

• Direct students to visit Navigate.

• Consider inviting a member of the local law enforcement team or sexual assault emergency treatment program, such as Sexual Assault Forensic Examiner (SAFE) programs, to speak with the class.

• Consider inviting a gynecology expert—physician, nurse, nurse practitioner, or physician assistant—to speak with the students on recognition of serious gynecologic conditions.

• Prepare several scenario cards ahead of time for students to use while working in groups for the assessment of patients with gynecologic emergencies. Be sure to include potentially life-threatening conditions for some of the patients to remind students to fully assess *all* patients.

• **Content connections:** Remind students about gynecologic-based emergencies discussed in previous lessons on the acute abdomen. Although ectopic pregnancy, spontaneous abortion, induced abortion-related emergencies, and other medical emergencies may be considered pregnancy related, remind students that some patients will not readily share some information or may not be considering pregnancy as a possibility. Point out that pregnancy and its related emergencies will be discussed in greater detail in future lessons.

• **Cultural considerations:** Gynecologic emergencies, perhaps more than any other prehospital emergency, may present a challenge to EMTs as they attempt to practice cultural sensitivity. Issues surrounding exposure, shame, and fear require a balance between respecting the patient’s privacy and gathering adequate information to treat appropriately.

Teaching Tips

• Gynecologic emergencies may be a difficult or embarrassing focus of discussion for some students. Consider having students work in small groups to encourage participation of each class member. Ideas for group activities to facilitate these topics are listed in the following Unit Activities section.

Unit Activities

**Writing assignments:** Ask students to research local specialty programs providing emergency management for victims of sexual assault. Point out that some EMS systems now have hospital emergency departments designated to this specialty. This possibility factors in the decision regarding where to transport patients. One such program students can learn more about is the SAFE program in New York state and Maryland.

**Student presentations:** Ask students to research and prepare a brief presentation on the effects and the potential life threats of date rape drugs. Encourage students to use a visual format and to use pictures and other graphics to enhance their topic presentation.

**Group activities:** Form two groups and distribute a scenario card to one of the groups. The scenario card should be prepared ahead of time with basic information, including possible patient condition. The group with the scenario card must quickly create a scenario (using the textbook for reference) that will reflect a patient with the condition listed on the card. The scenario should include each step of the patient assessment process as well as the management of the specific condition. Each member of the group with the scenario card will take a turn being the patient.

The other group will act as the EMTs and complete an assessment of the patient to determine the condition. Encourage the group to assign specific portions of the assessment and management to each member of the group. The EMTs in the group can then discuss their findings and develop a presumptive diagnosis. If time allows, redistribute cards or create additional scenarios and have groups switch roles.

**Medical terminology review:** Word Origin Game: Assign each student one or more words and have them research the origin of the word. Have students create colorful index cards with information and attach all cards to a large “chapter vocabulary” chart on the classroom wall. For example, the term “fallopian” comes from the Italian anatomist, Gabriele Falloppio, who named this part of the anatomy. Post the chart in the classroom as a visual vocabulary review.

**Visual thinking:** Have students create a gynecologic symptom pyramid. Create a list of symptoms and signs for a patient, and have students fill in the pyramid with possible diagnoses, listing the most potentially serious at the top. Have students share their ideas and discuss what additional findings might move a diagnosis higher or lower on the pyramid. For example, abdominal pain without bleeding might hold a presumptive diagnosis of pelvic inflammatory disease—not apparently life threatening. Have students add signs such as fever and low blood pressure and ask how this might indicate a more serious (and, therefore, higher up the pyramid) case of pelvic inflammatory disease.

Pre-Lecture

### You are the Provider

“You are the Provider” is a progressive case study that encourages critical thinking skills.

### Instructor Directions

**1.** Direct students to read the “You are the Provider” scenario found throughout Chapter 24.

**2.** You may wish to assign students to a partner or a group. Direct them to review the discussion questions at the end of the scenario and prepare a response to each question. Facilitate a class dialogue centered on the discussion questions and the Patient Care Report.

**3.** You may also use this as an individual activity and ask students to turn in their comments on a separate piece of paper.

Lecture

I. Introduction

A. Women are uniquely designed to conceive and give birth and are susceptible to a number of problems that do not occur in men.

II. Anatomy and Physiology

A. The female reproductive system includes internal and external structures.

B. External female genitalia

1. Vaginal opening

2. Labia majora and labia minora

3. Clitoris

4. Perineum

C. Internal structures

1. Ovaries lie on each side of the lower abdomen and produce an ovum (egg).

2. Fallopian tubes connect each ovary with the uterus.

3. The uterus is the muscular organ where the fetus grows during pregnancy.

4. The narrowest part of the uterus is the cervix, which opens into the vagina.

5. The vagina is the outermost cavity of a woman’s reproductive system.

D. When a female reaches puberty, she begins to ovulate and experience menstruation.

1. Menarche (onset of menstruation) usually occurs between age 11 and 16 years.

a. Any female who reaches menarche is capable of becoming pregnant.

E. Women continue the cycle of ovulation and menstruation until they reach menopause.

1. The end of menstrual activity usually occurs around age 50 years.

F. Each month one ovum is released into the fallopian tube (ovulation).

G. The process of fertilization begins in the vagina.

1. Sperm are deposited into the vagina from the male penis.

a. Sperm pass through the cervix into the uterus and eventually up the fallopian tubes, where the ovum is fertilized.

b. The embryo travels into the uterus, attaches to the uterine wall, and continues to grow.

H. If fertilization does not occur within about 14 days of ovulation, the lining of the uterus begins to separate, and menstruation occurs for about a week.

I. Hormones produced primarily in the ovaries control the process of ovulation and menstruation.

III. Pathophysiology

A. The causes of gynecologic emergencies are varied, ranging from sexually transmitted diseases to trauma.

B. Pelvic inflammatory disease (PID)

1. Infection of the upper organs of reproduction

a. Occurs almost exclusively in sexually active women

b. If infection expands to fallopian tubes, it will cause scarring.

i. Can result in increased risk of ectopic pregnancy or sterility

c. If infection expands to ovaries, it can lead to the development of a life-threatening abscess.

2. Most common presenting sign of PID is generalized lower abdominal pain.

a. Other signs include abnormal or foul-smelling vaginal discharge, increased pain with intercourse, fever, general malaise, and nausea and vomiting.

3. Risk factors

a. Multiple sex partners and/or a partner who has had multiple sex partners

b. Untreated sexually transmitted disease

c. Past history of PID

d. Being sexually active

e. Younger than 26 years of age

f. Douching

g. Using an IUD for birth control

C. Sexually transmitted diseases (STDs)

1. STDs can lead to more serious conditions, such as PID.

2. Chlamydia

a. Most common STD in the United States

b. Usually mild or absent symptoms

c. Infection of the cervix can spread to the rectum and can progress to PID.

3. Bacterial vaginosis

a. The most common vaginal infection to afflict women ages 15–44 years

b. Untreated, it can progress to premature birth or low birth weight in case of pregnancy, make the patient more susceptible to other serious infections, and cause PID.

4. Gonorrhea

a. Grows and multiplies rapidly in warm, moist areas of reproductive tract

i. Cervix, uterus, fallopian tubes in women

ii. Urethra in men and women

b. Severe infections present with cramping and abdominal pain, nausea, vomiting, and bleeding between periods.

c. If the infection is not treated, the bacterium may enter the bloodstream and spread to other parts of the body, including the brain.

D. Vaginal bleeding

1. Possible causes include:

a. Abnormal menstruation

b. Vaginal trauma

c. Ectopic pregnancy

d. Spontaneous abortion

e. Cervical polyps

f. Cancer

IV. Patient Assessment

A. Obtaining an accurate and detailed assessment is critical when dealing with gynecologic issues.

B. Scene size-up

1. Scene safety

a. Is the scene safe?

i. Will you need assistance?

ii. How many patients do you have?

iii. What is the nature of the illness?

iv. Have you taken standard precautions?

b. Gynecologic emergencies can involve large amounts of blood and body fluids potentially contaminated with organisms that can cause communicable diseases.

c. Where or in what position is the patient found?

d. If she is at home, what is the condition of the residence?

e. If a crime scene, you may be required to testify in court regarding conditions on your arrival. Your documentation needs to be accurate and thorough.

f. Involve the police if any type of assault is suspected.

g. In cases of sexual assault, it is important to have a female EMT provide patient care.

2. Mechanism of injury (MOI)

a. The NOI or MOI in some patients with gynecologic problems may or may not be easily understood from the dispatch information.

b. In other patients, patient history may reveal the nature of the condition.

C. Primary Assessment

1. Form a general impression.

a. Is the patient stable or unstable?

b. Use the AVPU scale to determine the patient’s level of consciousness.

2. Always evaluate the airway and breathing immediately to ensure they are adequate.

3. Palpate a pulse and evaluate skin color, temperature, and moisture to help identify blood loss in a patient.

4. Most cases of gynecologic emergencies are not life threatening

a. If patient has signs of shock, then rapid transport is warranted.

D. History taking

1. Investigate chief complaint.

a. Some questions may be extremely personal to the patient.

b. Be sensitive to the patient’s feelings and protect her privacy and dignity.

2. For abdominal pain: ask about onset, duration, quality, and radiation; provoking or relieving factors; and associated symptoms such as syncope, light-headedness, nausea, vomiting, and fever.

3. For vaginal bleeding: ask about onset, duration, quantity (number of sanitary pads soaked), and associated symptoms such as syncope and light-headedness.

4. SAMPLE history

a. Ask about birth control pills and devices.

b. Ask about medical conditions and last menstrual period.

E. Secondary assessment

1. Pertinent secondary assessment findings should include:

a. Vital signs: blood pressure, pulse, skin color, orthostatic vital signs

b. Abdomen: distention and tenderness

c. Genitourinary: visible bleeding

d. Neurologic: mental status

2. Physical examinations

a. Should be limited and professional

i. Only examine the genitalia if it is necessary to do so to treat the patient.

b. Patients age 65 years and older may have concerns related to hormone replacement therapy, cancer, pelvic floor collapse, or urinary incontinence.

c. For vaginal bleeding: visualize the bleeding and ask about quality and quantity.

d. Observe for vaginal discharge.

e. Fever, nausea, and vomiting are considered significant in gynecologic emergencies.

f. Syncope considered significant; treat as being in shock until proven otherwise.

3. Assess the patient’s:

a. Heart rate, rhythm, and quality

b. Respiratory rate, rhythm, and quality

c. Skin color, temperature, and condition

d. Capillary refill time

e. Blood pressure

f. Consider orthostatic vital signs

4. Consider using noninvasive blood pressure monitoring to continuously track patient’s blood pressure.

F. Reassessment

1. Repeat the primary assessment.

2. There are very few interventions with a gynecologic emergency.

3. Communicate all relevant information to the staff at the receiving hospital, including the possibility of pregnancy.

V. Emergency Medical Care

A. Maintain the patient’s privacy as much as possible.

1. If in a public place, move her to the ambulance.

2. Have a female EMT participate in the patient’s care if possible.

B. Excessive internal vaginal bleeding

1. Use sanitary pads on the external genitalia to absorb the blood.

2. Document the number of sanitary pads that were saturated with blood.

C. The external genitals have a rich nerve supply.

1. This makes injuries to the area very painful.

2. Treat external lacerations, abrasions, or tears with moist, sterile compresses.

a. Under no circumstances should you pack or place dressings in the vagina.

VI. Assessment and Management of Specific Conditions

A. Pelvic inflammatory disease (PID)

1. A patient with PID will complain of abdominal pain.

a. Pain usually starts during or after normal menstruation.

b. The pain may be made worse by walking. Patients often present with a distinctive gait that appears as a shuffle.

2. Prehospital treatment is limited.

3. Nonemergency transport is usually recommended.

B. Sexual assault

1. Sexual assault and rape are common in the United States.

2. EMTs called on to treat a victim of sexual assault face many complex issues.

a. Issues range from obvious medical ones to serious psychological and legal issues.

3. You may be the first person the victim has contact with after the encounter.

a. Professionalism, tact, kindness, and sensitivity are important.

4. When performing your assessment, be aware of drugs used during sexual assault or rape for the intended purpose of incapacitating a person.

5. If possible, give the patient the option of being treated by a female EMT.

6. Your focus should be:

a. Medical treatment of patient

b. Psychological care of patient

c. Preserve evidence

7. It may be necessary to persuade the patient not to clean herself.

a. Doing so can destroy evidence.

b. Patient should also be discouraged from urinating, changing clothes, moving her bowels, or rinsing out her mouth.

8. Offer to call the local rape crisis center for the patient.

9. Take the patient’s history and limit any physical examination to a brief survey for life-threatening injuries.

Post-Lecture

## Assessment in Action

A. Assessment in Action is available in the Navigate course.