

## Component III: Clinical

### Module B: Specialty Procedures

#### Topic 9: Assisting with Colon Procedures

##### Statement of Purpose

To prepare the learner with basic knowledge and skills necessary to assist with colon procedures.

##### Student Learning Outcomes

Upon completion of this topic, the learner will be able to:

1. Spell and define key terms.
2. List the conditions that may be detected with a sigmoidoscopy.
3. Explain how the patient is prepared for the sigmoidoscopy.
4. List the common responsibilities of the Medical Assistant before, during and after the sigmoidoscopy.
5. Compare and contrast the flexible fiberoptic and rigid sigmoidoscopy.
6. List the conditions that may be detected with a colonoscopy.
7. Explain how the patient is prepared for the colonoscopy.
8. List the common responsibilities of the Medical Assistant before, during and after the colonoscopy.

##### Terminology

- |                       |   |
|-----------------------|---|
| 1. Anorexia           | 12. Hemorrhoids                         |
| 2. Cathartic          | 13. Irritable Bowel Syndrome (IBS)      |
| 3. Colon              | 14. Nothing by mouth (NPO-“Nil per os”) |
| 4. Colonoscopy        | 15. Peritonitis                         |
| 5. Colorectal         | 16. Polyps                              |
| 6. Digestion          | 17. Proctoscopy                         |
| 7. Diverticulitis     | 18. Rectum/rectal                       |
| 8. Diverticulosis     | 19. Right lower quadrant (RLQ)          |
| 9. Enema              | 20. Sequela                             |
| 10. Fiberoptic        | 21. Sigmoidoscopy                       |
| 11. Flatus/flatulence | 22. Ulcerative colitis                  |

##### References

1. Kronenberger, J., Southard D. L., & Woodson, D. (2013). *Comprehensive Medical Assisting* (4<sup>th</sup> Ed.). Philadelphia, PA: Lippincott, Williams & Wilkins.
2. Booth, K.A., Whicker, L.G., Wyman, T.D., & Moaney-Wright, S. (2011). *Medical Assisting: Administrative & Clinical Competencies with Anatomy and Physiology*. (4<sup>th</sup> Ed.). New York, NY: McGraw-Hill Company, Inc.

Content Outline/Theory Objectives	Suggested Learning Activities
<p><b>Objective 1</b>  <b>Spell and define key terms.</b></p> <ul style="list-style-type: none"> <li>A. Review the terms listed in the terminology section.</li> <li>B. Spell the listed terms accurately.</li> <li>C. Pronounce the terms correctly.</li> <li>D. Use the terms in their proper context.</li> </ul>	<ul style="list-style-type: none"> <li>A. Games: word searches, crossword puzzles, Family Feud, Jeopardy, bingo, spelling bee, hangman, and concentration.</li> <li>B. Administer vocabulary pre-test and post-test.</li> <li>C. Discuss learning gaps and plan for applying vocabulary.</li> </ul>
<p><b>Objective 2</b>  <b>List the conditions that may be detected with a sigmoidoscopy.</b></p> <ul style="list-style-type: none"> <li>A. Conditions of the rectum <ul style="list-style-type: none"> <li>1. Polyps.</li> <li>2. Hemorrhoids.</li> <li>3. Rectal cancer.</li> </ul> </li> <li>B. Conditions of the sigmoid colon <ul style="list-style-type: none"> <li>1. Ulcerative colitis <ul style="list-style-type: none"> <li>a. Signs and symptoms <ul style="list-style-type: none"> <li>1) Diarrhea (most common).</li> <li>2) Abdominal pain.</li> <li>3) Fever (common and often persistent).</li> <li>4) Abdominal mass (frequent in right lower quadrant).</li> </ul> </li> <li>b. Onset, three typical types <ul style="list-style-type: none"> <li>1) First type <ul style="list-style-type: none"> <li>• Gradual, beginning with malaise and vague abdominal discomfort.</li> <li>• Developing into attacks of cramping abdominal pain, with passage of blood, pus and mucus.</li> <li>• Stools tend to be scanty and hard.</li> </ul> </li> <li>2) Second type <ul style="list-style-type: none"> <li>• Abrupt, manifested by bloody diarrhea, fever, anorexia, and weight loss.</li> <li>• Stools can be liquid or hard.</li> <li>• Rectum and anus are spastic.</li> </ul> </li> <li>3) Third type <ul style="list-style-type: none"> <li>• Abrupt onset.</li> <li>• Course is rapid and fulminating.</li> </ul> </li> </ul> </li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Assign students to obtain and review current articles and brochures on colorectal cancer, polyps, ulcerative colitis and other conditions of the intestinal tract.</li> <li>D. Have students create a poster that will identify and relay information for the general public.</li> <li>E. Have students gather the equipment and supplies necessary for sigmoidoscopy.</li> </ul>

- Can be fatal due to toxicity or shock from the sequela.

## 2. Diverticulosis

- Thinning of the lining of the intestinal wall of the bowel.
- Out-pouching of the mucosa.
- Most common in the sigmoid colon.
- Diverticulitis occurs when the diverticula get inflamed.
- Ruptured diverticula can result in peritonitis (inflammation of the peritoneum.)

## 3. Tumors/malignant growths

- Early diagnosis allows for good survival rates.
- Usually slow to spread.
- Etiology is linked to diets containing large amounts of animal fat and low in fiber.
- Commonly associated in patients with history of ulcerative colitis and colorectal polyps.
- Early signs are vague pain and occasional bloody stool.
- Late signs are anemia, weakness, diarrhea, extreme constipation, anorexia, weight loss.

## 4. Irritable Bowel Syndrome (IBS)

- Chief complaint is bouts of constipation alternating with diarrhea.
- Symptoms resemble ulcerative colitis.
- More common in women than in men.
- Prognosis is good.

<p><b>Objective 3</b>  <b>Explain how the patient is prepared for the sigmoidoscopy.</b></p> <ul style="list-style-type: none"> <li>A. Pre-procedure instructions <ul style="list-style-type: none"> <li>1. Diet as instructed by Physician. <ul style="list-style-type: none"> <li>a. Liquid diet without dairy products for a full day prior to the procedure.</li> <li>b. Clear liquid diet for the evening meal prior to the procedure.</li> </ul> </li> <li>2. Bowel preparation as ordered by Physician <ul style="list-style-type: none"> <li>a. Laxative the evening prior to the procedure.</li> <li>b. Rectal suppository, Fleet's enema or cleansing enema the morning of the procedure.</li> </ul> </li> <li>3. Nothing by mouth except water after midnight prior to the procedure.</li> <li>4. No prior preparation in order to view the mucosa in its normal state.</li> </ul> </li> <li>B. During procedure <ul style="list-style-type: none"> <li>1. Patient undressed from waist down or completely; patient gown.</li> <li>2. Sim's or knee-chest position.</li> <li>3. Reassurance is given throughout the exam.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> <li>C. Have students give instructions to each other in pairs.</li> </ul>
<p><b>Objective 4</b>  <b>List the common responsibilities of the Medical Assistant before, during, and after the sigmoidoscopy.</b></p> <ul style="list-style-type: none"> <li>A. Pre-procedure <ul style="list-style-type: none"> <li>1. Greet and identify the patient.</li> <li>2. Instructions are given to the patient.</li> <li>3. Check function of suction equipment.</li> <li>4. Prepare exam room with necessary equipment and supplies <ul style="list-style-type: none"> <li>a. Non sterile gloves.</li> <li>b. Water soluble lubricant.</li> <li>c. Gauze squares.</li> <li>d. Sigmoidoscope.</li> <li>e. Long cotton tipped applicators.</li> <li>f. Drape sheet fenestrated or non-fenestrated.</li> <li>g. Suction machine with H<sub>2</sub>O.</li> <li>h. Tissue.</li> <li>i. Biopsy forceps.</li> <li>j. Specimen container lab request form.</li> <li>k. Patient's chart.</li> </ul> </li> </ul> </li> <li>B. During the exam <ul style="list-style-type: none"> <li>1. Position patient and help patient to maintain position.</li> <li>2. Provide reassurance to patient.</li> <li>3. Observe patient for pain or discomfort.</li> <li>4. Instruct patient to breathe slowly using</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>A. Lecture/Discussion</li> <li>B. Assigned Readings</li> </ul>

<p>relaxation breathing or “pursed lip” breathing.</p> <ol style="list-style-type: none"> <li>Assist Physician with lubricants, swabs, biopsy equipment and specimen containers.</li> </ol> <p>C. Post procedure</p> <ol style="list-style-type: none"> <li>Assist the patient into a comfortable, resting position.</li> <li>Provide the patient with personal cleaning wipes and assist as needed.</li> <li>Take and record vital signs before allowing the patient to stand.</li> <li>Give the patient instructions per Physician orders.</li> <li>Clean the exam room.</li> <li>Route the specimens according to office protocol.</li> <li>Clean the sigmoidoscope as directed by manufacturer.</li> <li>Document the procedure.</li> </ol>	
<p><b>Objective 5</b>  <b>Compare and contrast the flexible fiberoptic and rigid sigmoidoscopy.</b></p> <ol style="list-style-type: none"> <li>Flexible fiberoptic sigmoidoscope <ol style="list-style-type: none"> <li>Length is 14 inches (35 cm).</li> <li>Better visualization.</li> <li>Less discomfort to patient.</li> <li>Scope is thin and can maneuver curves.</li> </ol> </li> <li>Rigid sigmoidoscope (not commonly used since the introduction of the flexible fiberoptic sigmoidoscope) <ol style="list-style-type: none"> <li>Length is 10 inches (25 cm).</li> <li>Supplied as reusable metal or disposable plastic.</li> <li>Some discomfort to patient, as it does not bend.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>Lecture/Discussion</li> <li>Assigned Readings</li> </ol>
<p><b>Objective 6</b>  <b>List the conditions that may be detected with a colonoscopy.</b></p> <ol style="list-style-type: none"> <li>Screening for colon polyps that may lead to colon cancer.</li> <li>Determine the cause of: <ol style="list-style-type: none"> <li>Diarrhea.</li> <li>Constipation.</li> <li>Bleeding.</li> <li>Lower abdominal pain.</li> </ol> </li> <li>Diagnose <ol style="list-style-type: none"> <li>Hemorrhoids.</li> <li>Ulcerative colitis.</li> <li>Diverticulosis/diverticulitis.</li> <li>Tumors/malignant growths.</li> <li>Irritable Bowel Syndrome.</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>Lecture/Discussion</li> <li>Assigned Readings</li> <li>Have students gather the equipment/supplies necessary for colonoscopy.</li> </ol>
<p><b>Objective 7</b>  <b>Explain how the patient is prepared for the colonoscopy.</b></p> <ol style="list-style-type: none"> <li>Pre-procedure instructions.</li> </ol>	<ol style="list-style-type: none"> <li>Lecture/Discussion</li> <li>Assigned Readings</li> <li>Have students give</li> </ol>

<ol style="list-style-type: none"> <li>1. Diet as instructed by Physician <ol style="list-style-type: none"> <li>a. Clear liquid diet 24 to 48 hours prior to the procedure.</li> <li>b. Nothing by mouth except water after midnight prior to the procedure.</li> </ol> </li> <li>2. Bowel preparation as ordered by Physician <ol style="list-style-type: none"> <li>a. Clear colon of fecal material.</li> <li>b. Take prescribed cathartic (bowel emptying) on the two evenings prior to the procedure.</li> <li>c. Use prepackaged enema preparation or consume the prescribed electrolyte solution over a 2-4 hour period.</li> </ol> </li> </ol> <p>B. During procedure</p> <ol style="list-style-type: none"> <li>1. Patient undressed from waist down or completely; patient gown.</li> <li>2. Patient is given a sedative or analgesic.</li> <li>3. Sim's position.</li> <li>4. Reassurance is given throughout the exam.</li> </ol>	<p>instructions to each other in pairs.</p>
<ol style="list-style-type: none"> <li>4. Prepare exam room with necessary equipment and supplies <ol style="list-style-type: none"> <li>a. Non sterile gloves.</li> <li>b. Water soluble lubricant.</li> <li>c. Gauze squares.</li> <li>d. Colonoscope.</li> <li>e. Long cotton tipped applicators.</li> <li>f. Drape sheet fenestrated or non-fenestrated.</li> <li>g. Suction machine with H<sub>2</sub>O.</li> <li>h. Tissue.</li> <li>i. Biopsy forceps.</li> <li>j. Specimen container.</li> <li>k. Lab request form.</li> <li>l. Patient's chart.</li> </ol> </li> </ol> <p>B. During the exam</p> <ol style="list-style-type: none"> <li>1. Position patient and help to maintain position.</li> <li>2. Drape patient.</li> <li>3. Provide reassurance.</li> <li>4. Observe patient for pain or discomfort.</li> <li>5. Instruct patient to breathe slowly using relaxation breathing or "pursed lip" breathing.</li> <li>6. Assist Physician with lubricants, swabs, biopsy equipment and specimen containers.</li> </ol> <p>C. Post procedure</p> <ol style="list-style-type: none"> <li>1. Assist the patient into a comfortable, resting position.</li> <li>2. Provide the patient with personal cleaning wipes and assist as needed.</li> <li>3. Take and record vital signs before allowing the patient to stand.</li> <li>4. Give the patient instructions per Physician</li> </ol>	<p>A. Lecture/Discussion B. Assigned Readings</p>

<p>orders.</p> <ol style="list-style-type: none"> <li>5. Ensure that patient has someone to drive them home (secondary to sedative).</li> <li>6. Clean the exam room.</li> <li>7. Route the specimens according to office protocol.</li> <li>8. Clean the colonoscope as directed by manufacturer.</li> <li>9. Document the procedure.</li> </ol>	
---	--