Student Name: Reagan Hockenbrock
Medical Diagnosis/Disease: Crohn's Disease

**NCLEX IV *(8)*: Physiological Integrity/Physiological Adaptation**

## Anatomy and Physiology
### Normal Structures

**Functions:** Supply the body and cells with nutrients by ingestion, digestion, and absorption; eliminate natural waste products of digestion through excretion
**Organs:**
**Mouth:** site of mastication, where food enters and is first broken down, tongue progresses mastication and moves food where it is swallowed
**Pharynx:** where the swallowing reflex occurs, moving food from the mouth to the esophagus
**Esophagus**: connects the mouth to the stomach, food travels by peristalsis where its entrance to the stomach is controlled by the lower esophageal sphincter
**Stomach**: further breaks down food through gastric secretions, stores food, empties into the small intestine through small boluses
**Small Intestine:** composed of the duodenum, jejunum, and ileum; contains villi and microvilli which aid in movement and absorption, where most of the digestion and absorption occurs.
**Large intestine:** site of water and electrolyte absorption; where feces is formed and stored in **rectum** before defecation through the **anus;** defecation occurs by the stimulus of sensory nerve ending and contraction of the rectum and internal anal sphincter

## Pathophysiology of Disease

Crohn's disease is a form of inflammatory bowel disease (IBD). IBD is defined as chronic inflammation of the GI tract that is characterized by periods of remission and periods of exacerbation. IBD occurs more often in those with family Hx, however, Crohn's disease has been linked to the following genes: NOD2, ATG16L1, IL23R, and IRGM. IBD is an autoimmune disease affecting one's intestinal tract. This autoimmune disease creates inflammation leading to the destruction of healthy tissue withing the GI tract. Crohn's disease can affect the GI tract anywhere from the mouth to anus, but most affects the distal ileum and proximal colon. This inflammation affects all layers of the bowel wall and creates deep ulcerations. Ulcerations can be longitudinal and penetrate between "islands" of inflamed edematous mucosa (creating a cobblestone appearance). Portions of normal tissue can appear between ulcerations.

**NCLEX IV *(7)*: Reduction of Risk**

## Anticipated Diagnostics

### Labs

CBC and Chem Panel, stool examination (looking for blood, pus, mucus, or infectious organisms)

### Additional Diagnostics

Double contrast (barium swallow/enema), CT/MRI, colonoscopy, capsule endoscopy

**NCLEX II *(3)*: Health Promotion and Maintenance**

## Contributing Risk Factors

Poor diet, smoking, stress, medications (NSAIDs, ABX, oral contraceptives)

## Signs and Symptoms

Diarrhea, cramping, ABD pain, fever, fatigue, weight loss, rectal bleeding

**NCLEX IV *(7)*: Reduction of Risk**

## Possible Therapeutic Procedures

### Non-surgical

Hospitalization for severe exacerbations, medication

### Surgical

Strictureplasty, reanastomosis (Sx is not curative but palliative)

## Prevention of Complications

Fistulas, strictures, bowel obstruction, perforated bowel leading to peritonitis or abscess formation, hemorrhage, short bowel syndrome (SBS).

**NCLEX IV *(6)*: Pharmacological and Parenteral Therapies**

## Anticipated Medication Management

Aminosalicylates, antimicrobials, corticosteroids, immunomodulators, biologic therapies, "step up" and "step down" therapies, opioid anelgesics

**NCLEX IV *(5)*: Basic Care and Comfort**

## Non-Pharmacologic Care Measures

Controlling inflammation, correcting malnutrition, combatting and preventing infections, bowel rest, perianal skincare, soothing compress, sitz bath

**NCLEX III *(4)*: Psychosocial/Holistic Care Needs**

## What stressors might a patient with this diagnosis be experiencing?

Irritability, frustration, loss of control, loss of role in family or work, embarrassment, pain and discomfort

**Client/Family Education**

## List 3 potential teaching topics/areas

- The importance of rest and diet management.
- Perianal care.
- Avoidance of stressors and prevention of exacerbations.

**NCLEX I *(1)*: Safe and Effective Care Environment**

## Multidisciplinary Team Involvement

(Which other disciplines do you expect to share in the care of this patient)

Gastroenterologist, case management, nutritionist/dietician, primary care physician, general surgeon

# Potential Patient Problems (Nursing Diagnoses)

**To Be Completed Before the Simulation**

Anticipated Patient Problem: **Diarrhea**

**Clinical Reasoning:** Loose, liquid stools, > 3 in 24 hours; abdominal pain; abdominal cramping; changes in bowel sounds on auscultation; changes in perianal tissue.

**Goal 1:** Patient passes soft, formed stool no more than two times during my time of care.

| **Relevant Assessments**<br><br>(Prework) What assessments pertain to your patient's problem? Include timeframes. | **Multidisciplinary Team Intervention**<br><br>(Prework) What will you do if your assessment is abnormal? |
|---|---|
| Assess for abdominal pain and cramping, detailing onset, numeric rating, and description of feeling every two hours. | Encourage the intake of 125 mL of fluids every hour in addition to 200 mL for each loose stool. |
| Assess for frequency of bowel movements and characteristic of stool at the beginning of my time of care and following each bowel movement. | Administer antidiarrheal medications as prescribed. |
| Auscultate for bowel sounds q2h. | Educate on bland foods, specifically the B.R.A.T. diet, before each meal tray is served. |
| Assess for factors contributing to diarrhea, including emotional stressors, medications, foreign travel, and Hx of gastrointestinal illness at the beginning of my time of care. | Promote relaxation and stress relief by eliminating loud noises and dimming environmental lighting throughout my time of care. |
| Inspect the condition of the perianal skin at the beginning of my time of care and after each bowel movement. | Educate the importance of perianal hygiene and the use of wet non-fragranced wiping after each bowel movement |
| Explore the emotional impact of diarrhea and or fecal soiling accidents at the beginning of my time of care. | Comfort and reassure the client that frequent diarrheal episodes are a common manifestation of many gastrointestinal disorders after each verbalization of embarrassment by the client. |

**Goal 2**: Perianal tissues remain intact during my time of care.

**To Be Completed Before the Simulation**

Anticipated Patient Problem: **Acute Pain**

**Clinical Reasoning:** Self-reported pain using standardized pain intensity scale, self-reported pain characteristics, position to decrease pain, diaphoresis, facial expressions of pain, increased heart rate, blood pressure, and respiratory rate

**Goal 1:** Patient reports satisfactory pain control and a decreased intensity using a standardized pain scale during the time of my care.

| **Relevant Assessments**<br><br>(Prework) What assessments pertain to your patient's problem? Include timeframes. | **Multidisciplinary Team Intervention**<br><br>(Prework) What will you do if your assessment is abnormal? |
|---|---|
| Assess the patient's pain and their perception of pain using a standardized rating scale at the start of my care and q2h. | Determine the appropriate pain medication and administer it as ordered. |
| Determine any measures the patient has successfully used to control the pain at the start of my care. | Encourage the patient to engage in usual diversional activities, hobbies, and relaxation techniques after every observed episode of sudden pain. |
| Assess the patient's vital signs for signs and symptoms of pain, including elevated readings from baseline, q2h. | Anticipate the need for pain relief q2h. |
| Assess the patient's expectations for pain relief after each self-reported pain rating. | Encourage and walk the patient through controlled, deep breathing q1h. |
| Evaluate what the pain means to the patient after each self-reported pain rating. | Instruct the patient to evaluate and report the effectiveness of measures used after each administered analgesic. |
| Assess to what degree cultural, environmental, intrapersonal, and intrapsychic factors may contribute to pain or pain relief at the beginning of my time of care. | Eliminate additional stressors or sources of discomfort throughout my time of care. |

**Goal 2:** Patient exhibits increased comfort such as baseline levels for heart rate, blood pressure, and respiratory rate during the time of my care.

**To Be Completed During the Simulation:**

**Actual Patient Problem:** Deficient fluid volume

**Clinical Reasoning:** Hx of ibuprofen use, serosanguineous fluid present in ostomy bag, hyperactive bowel sounds, pale appearance, full body chills, blood pressure 94/56.

Goal: Blood pressure will be ≥ 120/80 by the end of my care. Met: ☐ Unmet: ☐

Goal: Skin will return to baseline appearance of pink and warm by the end of my care. Met: ☐ Unmet: ☐

**Actual Patient Problem**: Acute Pain

**Clinical Reasoning:** Hx of Crohn's Disease and intermittent gastritis, Hx of headaches triggered by stress, self-reported pain of 6 on numeric rating score, pain characterized to be sore and crampy, states "full body aching"

Goal: Patient reports satisfactory pain control and a decreased intensity using a standardized pain scale during the time of my care. Met: ☐ Unmet: ☐

Goal: Patient exhibits increased comfort such as relaxed facial features and relaxed body movements by the end of my care. Met: ☐ Unmet: ☐

Additional Patient Problems: Impaired gas exchange

Below will be your notes, add more lines as needed. **Relevant Assessments:** Indicate pertinent assessment findings. **Multidisciplinary Team Intervention:** What interventions were done in response to your abnormal assessments? **Reassessment/Evaluation:** What was your patient's response to the intervention?

| Patient Problem | Time | Relevant Assessments | Time | Multidisciplinary Team Intervention | Time | Reassessment/ Evaluation |
|---|---|---|---|---|---|---|
| Deficient fluid volume | 1615 | Serosanguineous fluid present in ostomy bag | 1830 | Began administration of blood | 1930 | Full body chills and fever; reaction to blood transfusion |
| Acute Pain | 1618 | States abdominal pain to be "sore and crampy", rated pain a 6 on 0-10 score, located at the top of her stomach. "it began this morning"; States that the pain worsens when stressed. "when I get stressed I get headaches and I take ibuprofen" | 1940 | Spoke with provider and requested an order for ibuprofen | 1945 | Order for acetaminophen 650 milligrams PO now and every 2 hours until 8 a.m. |
| Deficient fluid | 1625 | Hyperactive bowel | 2000 | Endoscopy was | 0800 | "I feel a lot of |

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|---|---|---|---|---|---|---|
| volume | | sounds | | performed by the gastroenterologist team. | | cramping and discomfort", rated pain at 8 on scale of 0-10 |
| Impaired gas exchange | 1630 | States "I feel like im going to faint", O2 saturation is 94% at room air | 1635 | Administer 2L oxygen via NC, lowered HOB to supine position | 1900 | Oxygen saturation is 95% on 2L NC |
| Deficient fluid volume | 1631 | Skin appears pale | 1700 | Requested nurse aid to retrieve the red blood cell bag. | 1400 (2/19) | Skin appears pink and warm |
| Deficient fluid volume | 1930 | Temperature 101.8 degrees Fahrenheit, BP 94/56 | 1935 | Stopped the blood transfusion | 1940 | BP 100/60, states "I feel much better" |
| Acute Pain | 1930 | "I feel chilly and my body aches all over. Can I have some ibuprofen?" | 1945 | Administered Acetaminophen 650-milligrans PO per provider phone order. | 2000 | Exhibits a relaxed state. |
| Acute Pain | 0800 (2/19) | "I feel a lot of cramping and discomfort", rated pain at 8 on scale of 0-10 | 0830 (2/19) | Administered 4 milligrams via IV bolus | 0900 (2/19) | "I feel so much better", rated pain a 2 on scale of 0-10 |

**ATI Virtual Clinical Questions and Reflection:**

1) Identify two members of the healthcare team collaborating in the care of this patient:
    a. **The charge nurse Bonnie.**
    b. **M. McGuire MD**
2) What were some steps the nursing team demonstrated that promoted patient safety?
    a. **Communicated efficiently with other health care team members, prioritizing patient's emergent condition and self-reported pain.**
    b. **Lowered the HOB once the client began to complain of feeling dizzy and expressing the feeling of needing to faint.**
    c. **Immediately stopping the blood transfusion once the patient began to experience symptoms of a reaction to the blood transfusion.**
3) Do you feel the nurse and medical team utilized therapeutic communication techniques when interacting with individuals, families, and health team members of all cultural backgrounds?
    a. If **yes**, describe: The nurse had excellent therapeutic communication techniques. She had introduced herself to the client and client's sister throughout her time of care and used direct eye contact when looking and speaking towards the client. When educating her on the effects of her frequent Ibuprofen use, she was kind and understanding while educating her to no longer take it as often as she was prior. This education showed empathy and patience, which is important for therapeutic communication.
    b. If **no**, describe: _____
    _____

**Reflection**

1) Go back to your Preconference Template:
    a. Indicate (circle, star, highlight, etc.) the components of your preconference template that you saw applied to the care of this patient.
2) Review your Nursing Process Form: Did you select a correct priority nursing problem?
    a. If **yes,** write it here: During my preclinical paperwork, I had correctly identified one correct priority nursing problem. This had been **acute pain**.
    **b.** If **no,** write what you now understand the priority nursing problem to be: My other priority nursing problem had been incorrect. My new priority nursing problem is **deficient fluid volume**. After reading the patient's chart and completing my own assessment, I now understand that the patient was experiencing early signs and symptoms of hypovolemic shock due to her gastrointestinal bleeding. This was made apparent by the fluid emitting from her ostomy bag, her continuous hypotension, and her complaints of feeling unwell.
3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used?
    a. Were there interventions you included that *were not* used in the scenario that could help this patient?

i. If **yes**, describe:

1. I had seen many of my anticipated nursing assessments used during the simulation. **These included the following:** Assess for abdominal pain and cramping, detailing onset, numeric rating, and description of feeling every two hours; Auscultate for bowel sounds q2h; Assess for factors contributing to diarrhea, including emotional stressors, medications, foreign travel, and Hx of gastrointestinal illness at the beginning of my time of care; Assess the patient's pain and their perception of pain using a standardized rating scale at the start of my care and q2h; Determine any measures the patient has successfully used to control the pain at the start of my care; Assess the patient's vital signs for signs and symptoms of pain, including elevated readings from baseline, q2h.
2. During the simulation, some of my anticipated nursing interventions had been performed. **These include the following:** Determine the appropriate pain medication and administer it as ordered; Instruct the patient to evaluate and report the effectiveness of measures used after each administered analgesic.

ii. If **no**, describe:

1. During the simulation, many of my anticipated nursing assessments had not been done. **These include the following**: Assess for frequency of bowel movements and characteristic of stool at the beginning of my time of care and following each bowel movement; Inspect the condition of the perianal skin at the beginning of my time of care and after each bowel movement; Explore the emotional impact of diarrhea and or fecal soiling accidents at the beginning of my time of care; Assess the patient's expectations for pain relief after each self-reported pain rating; Evaluate what the pain means to the patient after each self-reported pain rating; Assess to what degree cultural, environmental, intrapersonal, and intrapsychic factors may contribute to pain or pain relief at the beginning of my time of care.
2. During the simulation, many of my anticipated nursing interventions had not been done. Many of these include interventions that I had created when diarrhea was my anticipated patient problem. **These include the following:** Encourage the intake of 125 mL of fluids every hour in addition to 200 mL for each loose stool; Administer antidiarrheal medications as prescribed; Educate on bland foods, specifically the B.R.A.T. diet, before each meal tray is served; Promote relaxation and stress relief by eliminating loud noises and dimming environmental lighting throughout my time of care; Educate the importance of perianal hygiene and the use of wet non-fragranced wiping after each bowel movement; Comfort and reassure the client that frequent diarrheal episodes are a common manifestation of many gastrointestinal disorders after each verbalization of embarrassment by the client; Encourage the patient to engage in usual diversional activities, hobbies, and relaxation techniques after every observed episode of sudden pain; Anticipate the need for pain relief q2h; Encourage and walk the patient through controlled, deep breathing q1h; Eliminate additional stressors or sources of discomfort throughout my time of care.

4) After completing the scenario, what is your patient at risk for developing?

a. Hypovolemic Shock

b. Why? As the patient was experiencing a gastrointestinal bleed, they were losing a great number of fluids. Although they were ordered a blood transfusion to combat the loss of blood already lost, they experienced a reaction to the blood transfusion shortly after it began, resulting in it not being completed. Due to the patient history of frequent Ibuprofen use and Crohn's disease, they are at an increased risk for another GI bleed in the future. If another GI bleed were to occur, the patient would be at risk for developing hypovolemic shock if it was not caught and treated in a timely manner.

5) What was your biggest "take-away" from participating in the care of this patient? How did this impact your nursing practice?

My biggest "take-away" from this assignment was the importance of trusting your own assessment. As important as it is to conduct your own research of a diagnosis to learn a general understanding and anticipate your nursing cancer, the textbook will never tell you the true problem that your patient is experiencing. Leading up to this simulation, I had researched Crohn's disease and read through many sources, including the textbooks. Each of these sources had stated Diarrhea to be the number one patient problem and most common chief complaint of Crohn's disease. However, when I began to care for this simulated patient, I realized that their true problem was deficient fluid volume due to their gastrointestinal bleeding. Although hypovolemic shock was briefly mentioned in my research and resources, it was not something that I anticipated to see early signs and symptoms of in my simulated patient. However, because I was able to assess these signs, I was able to prevent the patient from going into hypovolemic shock by performing the proper interventions. Overall, this simulation has reinforced the importance of completing my own detailed assessment of the patient.