Student Name: Jamesia Alphonse
Medical Diagnosis/Disease: Crohn's Disease
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NCLEX IV *(8)*: **Physiological Integrity/Physiological Adaptation**

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

Anatomy and Physiology	Pathophysiology of Disease	Anticipated Diagnostics
Normal Structures The GI tract extends around 30 ft from the mouth to the anus. There are 4 Layers (the mucosa lining, submucosa connective tissue, muscle and serosa) and 3 muscle layers: the oblique (inner) layer, circular (middle) layer, and longitudinal (outer) layer. The GI tract has its own nervous system: the enteric or intrinsic nervous system, which regulates motility and secretions. The ENS is composed of 2 networks: the Meissner plexus (controls secretion and sensory functions) and Auerbach plexus (major never supply to GI tract and controls GI movement). Venous blood draining the GI tract organs empties into the portal vein, which perfuses the liver. The celiac artery, superior mesenteric, and inferior mesenteric supply arterial blood to the GI tract. The peritoneum consists of 2 layers, the parietal layer (lines the abdominal cavity wall) and the visceral layer (covers the abdominal organs) The main function of the GI tract is to supply nutrients to body cells through ingestion, digestion and absorption. Elimination is the process of excreting waste products of digestion. Ingestion is the intake of food, Deglutition or swallowing is the mechanical portion of ingestion. It involves the mouth, pharynx, and esophagus. The oral cavity contains the teeth and tongue used for chewing and moving food to the back of the throat for swallowing. There are 3 pairs of salivary glands in the oral cavity: parotid glands, submaxillary glands, and sublingual glands that produce saliva. During ingestion the oropharynx is the route for food from mouth to esophagus. The epiglottis closes over the opening of the larynx during swallowing to prevent food and liquids	A chronic, progressive, inflammatory bowel condition that can occur in any part of the GI tract, the most common areas that are affected are the ileum and the first segment of the colon. Crohn's disease can be caused by genetics, gut microbe triggers, and immunological abnormalities. These lead to activation of inflammatory responses and bowel tissue injury. A series of changes occur affecting GI functioning, bowel patterns, and overall health and nutrition. Changes can include bowel wall and mesentery thickening, lymphedema with stricture formation of strictures, bowel obstruction and fistulas.	Labs CBC C-reactive protein CMP Serum albumin Occult blood Additional Diagnostics X-ray Ultrasound Upper endoscopy Colonoscopy CT scan

from entering the respiratory tract. The esophagus is a hollow, muscular tube that receives food from the pharynx and moves it to the stomach. With swallowing, the upper esophageal sphincter relaxes, and peristaltic waves move the bolus into the esophagus. The muscular layers contract and propel food into the stomach. The stomach's functions are to store food, mix food with gastric secretions, and empty contents in small boluses into the small intestine. The stomach is usually j- shaped and always contains gastric fluid and mucus. The main parts of the stomach are the fundus, body, and antrum. In the fundus the glands contain chief cells that secrete pepsinogen and parietal cells that secrete hydrochloric acid, water and intrinsic factor. Intrinsic factor promotes vitamin b12 absorption in the small intestine. The small intestine uptakes nutrients from the gut lumen to the bloodstream. It extends from the pylorus to the ileocecal valve . the small intestine is composed of the duodenum, jejunum and ileum. The functional units of the small intestine are villi which produces intestinal digestive enzymes. Villi also have cells called microvilli that chemically break down nutrients for absorption. Brunner's glands in the submucosa of the duodenum secrete fluid containing bicarbonate that neutralizes acidic fluids and protects mucosa. The large intestine is a hollow, muscular tube around 5 to 6 ft long and 2 inches in diameter. This is where water and electrolyte absorption occur. The large intestine also forms feces and serves as a reservoir for fecal mass until defecation. Microorganisms contribute to digestion by producing vitamin k and some b vitamins and breaking down proteins that are not digested or absorbed in the small intestine into amino acids. Food entering the stomach and duodenum triggers gastrocolic and duodenocolic reflexes, resulting in peristalsis in the colon. The liver is the largest internal organ in the

body the functional units of the liver are lobules, which consists of rows of hepatic cells. Sinusoids are lined with Kupffer cells that remove bacteria and toxins from the blood. The hepatic cells secrete bile into canals called canaliculi, these merge with other canals to form larger, interlobular ducts, which unite and make 2 main left and right hepatic ducts the portal circulatory system brings blood to the liver from the stomach, intestines, spleen and pancreas. The portal vein carries absorbed products of digestion directly to the liver. The gallbladder is a pear shaped sac that is found below the liver, the primary function is to concentrate and store bile. It holds up to 45 mL of bile. The presences of fat in the duodenum triggers the release of cholecystokinin, which causes the gallbladder to contract and release bile. Bile enters the duodenum at the ampulla of Vater. The pancreas is a gland laying behind the stomach. It has a head, body and tail. The pancreas has both exocrine and endocrine functions. The exocrine function contributes to digestion through the production and release of enzymes.

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

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

Contributing Risk Factors	Signs and Symptoms	Possible Therapeutic Procedures	Prevention of Complications
Smoking Family history of Crohn's disease Oral contraceptive use Diet	Abdominal pain Diarrhea Weight loss Fatigue Fever and chills Abdominal tenderness Fistulas	Non-surgical NG tube Surgical Bowel Resection Strictureplasty Fistula closure Colectomy Colostomy	(What are some potential complications associated with this disease process) Malnutrition Fistulas Peritonitis Osteoporosis Cancer Bowel obstructions

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

Anticipated Medication Management
Antibiotics Corticosteroids Immunosuppressive drugs Analgesics Anti-diarrhea drugs Vitamins and supplements

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

Non-Pharmacologic Care Measures
Dietary modification Enteral feeding Stress modification

NCLEX III *(4)*: **Care Needs**

What stressors might a patient with this diagnosis be experiencing?
Social isolation Decrease in activity

Client/Family Education

List 3 potential teaching topics/areas
• Avoid trigger foods • Smoking cessation • Stress management

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)
Gastroenterology Dietitian

Potential Patient Problems (Nursing Diagnoses)

To Be Completed Before the Simulation

Anticipated Patient Problem: Dehydration

Clinical Reasoning: Excessive diarrhea, urinary output less than 30 mL/h, dry oral mucosa

Goal 1 : will have 30 mL/h or greater of urine output

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes.	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
Assess urinary output q 4h	Encourage fluid intake of at 120 mL q 2h
Assess oral mucosa q 8h	Provide oral care PRN dry oral mucosa
Assess stool characteristics q 8h (watery, loose)	Administer anti-diarrhea drugs PRN 3 more loose watery stools
Assess electrolytes q 8h	Encourage intake of electrolyte solution q 4h
Assess for preferred fluids (apple juice, ginger ale) q 4h	Provide preferred fluids 120 mL q 2h
Assess vital signs (BP, HR) q 8h	Maintain IV fluids at all times

Goal 2: Oral mucosa will be moist and intact by the end of my care

To Be Completed Before the Simulation

Anticipated Patient Problem: Acute abdominal pain

Clinical Reasoning: 7/10 pain, facial grimacing, abdominal guarding

Goal 1: will report a 3/10 or lower pain by the end of my care

Relevant Assessments (Prework) What assessments pertain to your patient's problem? Include timeframes.	**Multidisciplinary Team Intervention** (Prework) What will you do if your assessment is abnormal?
Assess numerical pain number q 8h	Administer Morphine via IV as ordered by doctor
Assess for facial grimacing q 4h	Encourage to change positions slowly at all times
Assess for abdominal guarding q 4h	Provide calm and quiet environment at all times
Assess for gas, and abdominal discomfort q 4h	Administer medication for gas relief q 8h
Palpate abdomen to assess for tenderness q 8h	Encourage deep breathing and relaxation techniques PRN abdominal pain
Auscultate bowel sounds q 8h	Encourage to sit in semi- fowlers position to take pressure off of abdomen at all times

Goal 2: will demonstrate pain management technique by the end of my care

To Be Completed During the Simulation:

Actual Patient Problem: Deficient Knowledge

Clinical Reasoning: Exacerbation of chronic illness, new onset of symptoms

Goal: will teach back 3 types of foods that trigger exacerbations by the end of my care

Met: ☐ Unmet:☐

Goal: will list 3 stress management activities by the end of my care

Met: ☐ Unmet:☐

Actual Patient Problem: Acute abdominal pain

Clinical Reasoning:

facial grimacing, 6/10 pain

Unmet:☐

Goal: will have 3/10 or less pain by the end of my care

Met: ☐

Goal: will demonstrate pain management techniques by the end of my care

Met: ☐ Unmet:☐

Additional Patient Problems: risk for bleeding

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
Risk for bleeding	1530	Reports lightheadedness, dizziness	1530	Applied 2L NC and cold cloth to forehead, lowered HOB	1535	Still reporting dizziness and faintness
Risk for bleeding	1535	"I feel dizzy and faint"	1545	Administered 2 units of packed RBC	1550	"I feel chilly and cold"
Risk for bleeding	1550	"I feel chilly and cold" Temp 38.8 degrees Celsius	1550	Discontinued blood transfusion	1600	Collaborated with doctor for new orders
Acute pain	1630	Reports 8/10 pain and abdominal tenderness	1635	Administered 4mg of morphine via IV bolus	1645	Reports 2/10 pain and no abdominal tenderness
Deficient knowledge	1645	Reports drinking 5 alcoholic beverages everyday to help with stress	1650	Educated on different stress management techniques	1700	Agreed to try recommended techniques to manage stress
Deficient knowledge	1715	I had a frozen meal for dinner last night	1720	Encouraged high protein meals	1735	'I will start packing healthier lunches for

						work”

ATI Virtual Clinical Questions and Reflection:

1) Identify two members of the healthcare team collaborating in the care of this patient:
    a. **Esther RN**
    b. **Dr. March, Gastroenterologist**
2) What were three steps the nursing team demonstrated that promoted patient safety?
    a. **The nurses did a 2nd check before administering the blood to the patient**
    b. **Immediately stopped the blood transfusion when the patient began to show signs of a reaction**
    c. **Reassessed for signs and symptoms whenever the patient reported feeling dizzy or faint**
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: Yes, I feel that the nurses and medical team made sure that the individual always informed about the care that they would be receiving. The medical team also did a good job of making sure that the patient fully understood what was going on.
    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) What was the priority nursing problem? Provide rationale.

I think that the priority nursing problem was deficient knowledge. I believe this is the priority problem because the individual did not realize that a few of her lifestyle factors was the reason that she was having the GI bleed. One of the biggest underlying factors that could have caused her GI bleed was the NSAID's that she was taking regularly.

3) Review your Patient Problem Form: Did you see many of your anticipated nursing assessments and interventions used? Yes, a few of my assessments for acute pain were used, but only one of my interventions were used.
    a. Were there interventions you included that *were not* used in the scenario that could help this patient?
        i. If **yes**, describe:
        _____
        _____
        ii. If **no**, describe: **No I do not think there were any other interventions that could have been used in the scenario. The team did what they were supposed to do to improve the client's health and they followed up with education on how to possibly prevent another exacerbation of the clients chronic problem.**

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

   a. The client is at risk for developing an infection

   _____

   b. Why? The client is at risk for developing an infection because of the ileostomy. If not cared for correctly harmful bacteria can enter into the ileostomy causing an infection.

   _____

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

   The biggest takeaway from participating in the care of this patient is that some clients are not properly educated about their diagnosis. This individual was admitted to the hospital with something that could have possibly been avoided if she had been properly educated about Crohn's disease. Participating in this simulation has made me realize how important it is that all patients have the knowledge and understanding about any diagnosis they have whether acute or chronic.