N311 Care Plan #4

Lakeview College of Nursing

Kreonna Burnett

Demographics (5 points)

Date of Admission 10/20/2021	Patient Initials J.B.	Age 53 years	Gender Male
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Married	Allergies No Known Allergies
Code Status Full Code	Height 172.72 cm	Weight 76 kg	

Medical History (5 Points)

Past Medical History: Hypertension, and Abscess of sigmoid colon due to diverticulitis.

Past Surgical History: Insertion of chest tube (2016), and left inguinal hernia (2000)

Family History: Mother: part of pancreas removed, and colon cancer (Alive), and

Father: Prostate cancer, and electrical heart conditions (Alive)

Social History (tobacco/alcohol/drugs): Occasional use of alcohol (4 beers a month), Never

used tobacco or drugs.

Admission Assessment

Chief Complaint (2 points): Patient is here to discuss diverticulitis with

abscess on sigmoid colon. He states bowels are moving but not normal. He

thinks this is his only episode that he has had.

History of present Illness (10 points): Patient is a 53 year-old man who

developed some lower abdominal pain and constipation type symptoms during

a trip to Asheville, North Carolina. He ultimately went to the local hospital.

Mission Medical Center and was admitted September 29. He was diagnosed

with acute complicated sigmoid diverticulitis with small pelvic abscess and

coelenteric fistula. No definite fistula involving the bladder. He was treated

with IV antibiotics. He had no procedures or surgeries. Currently he reports

some mild discomfort in his left lower quadrant, but otherwise no abdominal

pain, no fever, no nausea or emesis. He continues to have bowel movements

and flatus. He reports some generalized fatigue but is generally feeling okay.

He has not had any previous abdominal surgery other than a left inguinal

hernia. He has never had a colonoscopy. Mother has colon cancer. Patient is

quiet, active and reports hiking 11 miles in the days prior to admission.

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Primary Diagnosis

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Primary Diagnosis on Admission (3 points): Abscess of sigmoid colon due

diverticulitis.

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points):

Diverticulitis is an inflammatory disorder of the colon. Diverticuli are weak areas that form

pouches off the wall of the large intestine. Usually, these pouches become filled with

stagnant intestinal contents, leading to obstruction and inflammation of the bowel wall.

Once the diverticula are inflamed, it is considered diverticulitis. When intestinal contents

block the diverticulum it cuts off the blood supply and provides an environment conducive

to the formation of infection. A history of chronic constipation, long-term laxative use, and

straining implies diverticulitis or malignancy. 80%-85 people with diverticulitis are

asymptomatic, but the risk increases with age. A history of recurrent left lower quadrant

abdominal pain over several years is consistent with diverticulitis, diverticular stricture, or

a similar disorder. Left lower quadrant tenderness is commonly associated with
diverticulitis. These diverticula are commonly found in the sigmoid and descending colon
(Capriotti, pp.746).

        The risk of developing diverticulitis before 40 years is lower than 5%; however, the
percentage rises to more than 65% by the age of 85 years. 15%-20% of those with
diverticulosis develop diverticulitis, and 15% to 25% of those with diverticulitis develop
complications leading to surgery; these complications include abscess formation, intestinal
rupture, peritonitis, and fistula formation. My patient developed an abscess on the sigmoid
colon due to diverticulitis which resulted in abdominal surgery. Diverticulitis occurs
equally in males and females. The mean age of diverticulitis appears to be 60 years. The
etiology of diverticular disease is associated with two main factors: weakness of the bowel
wall and increased intraluminal pressure. Diverticulitis is thought to be associated with
lack of dietary fiber and obesity. My patient height is 172cm and his weight is 76kg. The
normal weight for a person who is 172cm is 59-74kg; my patient is not obese, but he is
considered overweight which could be another factor to why he developed diverticulitis
(Capriotti, pp.746).

        Weakness in the bowel musculature can occur where branches of the blood vessels
enter the colonic wall, thus creating areas for bowel protrusion during periods of increased
intra-abdominal pressure. Those entry points for blood vessels are areas where diverticula
develop. When the bowel does not drain effectively, intestinal contents can become trapped,
collect and form a mass, and cause obstruction and irritation, thereby leading to
diverticulitis. Chronic diverticulitis can cause scarring and narrowing of the bowel lumen.

Signs and symptoms of diverticular disease depends on the severity of the inflammation and where in the bowel it occurs. The pain can be dull, episodic, or steady left lower or midabdominal pain. My patient developed a dull, and aching pain in his left lower quadrant. Usually there are alterations in bowel habits, including constipation, diarrhea, increased flatulence, anorexia, and low-grade fever. A patient with diverticulitis may have no signs of the disorder when given a physical examination. If diverticulitis exists, the patient usually has left lower quadrant abdominal tenderness, fever, and nausea. Traces of occult blood can be found in the stool. There are several diagnostics for diverticulitis, including abdominal x-ray, abdominopelvic CT scan, MRI, and ultrasound. A colonoscopy can also visualize the diverticula within the colon. Laboratory testing includes CBC with differential, serum electrolytes, serum amylase, and lipase to exclude perforation of viscera, liver enzymes, and bilirubin. Stool studies may be needed in patients with diarrhea (Capriotti, pp.747).

Inpatient treatment of diverticulitis includes administration of IV antibiotics, fluids, and pain medications. Patients who continue to improve are discharged and those who fail to improve are referred for surgery complicated diverticulitis. The extent of peritoneal contamination in complicated diverticulitis is evaluated according to the Hinchey classification system. The aim of surgery is to remove the diseased colonic segment while attempting to preserve the colonic integrity by creating an anastomosis. Surgery can be accomplished via an open abdominal or laparotomy procedure (Capriotti, pp.747).

Pathophysiology References (2/2) (APA):

Capriotti, T. (2020). *Davis Advantage for pathophysiology: Introductory concepts and clinical perspectives*. F.A. Davis.

Mayo Foundation for Medical Education and Research. (2020, May 7). *Diverticulitis*. Mayo
    Clinic. Retrieved November 2, 2021, from https://www.mayoclinic.org/diseases-
    conditions/diverticulitis/symptoms-causes/syc-20371758.

Laboratory Data (20 points)
If laboratory data is unavailable, values will be assigned by the clinical instructor

CBC <mark>Highlight All Abnormal Labs</mark>—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.90-4.98	N/A	3.90	N/A
Hgb	12.0-15.5	N/A	11.0 L	Value is abnormal due to diverticulum bleeding.
Hct	35-45	N/A	32.3	Value is abnormal due to a lower GI bleed.
Platelets	140-400	N/A	168	N/A
WBC	4.0-9.0	N/A	4.7	N/A
Neutrophils	40-70	N/A	61.8	N/A
Lymphocytes	10-20	N/A	22.0	Value is abnormal because patient abscess was removed so the WBC's are trying to repair the area.
Monocytes	3-13	N/A	7.3	N/A
Eosinophils	0.0-8.0	N/A	8.0	N/A
Bands	0.0-10.0	N/A	N/A	N/A

Chemistry <mark>Highlight All Abnormal Labs</mark>—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	135-145	N/A	138	N/A
K+	3.5-5.1	N/A	3.9	N/A
Cl-	98-107	N/A	106	N/A
CO2	22-29	N/A	26	N/A
Glucose	70-99	N/A	92	N/A
BUN	6-20	N/A	12	N/A
Creatinine	0.50-1.00	N/A	0.62	N/A
Albumin	3.5-5.2	N/A	N/A	N/A
Calcium	8.4-10.5	N/A	7.8 L	Value is low because calcium causes hemorrhages in diverticulitis so lowering it would be ideal to not cause that.
Mag	1.7-2.0	N/A	N/A	N/A
Phosphate	3.4-4.5	N/A	N/A	N/A
Bilirubin	0.0-1.2	N/A	N/A	N/A
Alk Phos	35-105	N/A	N/A	N/A

Urinalysis <mark>Highlight All Abnormal Labs</mark>—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Yellow, clear	N/A	N/A	N/A
pH	5.0-9.0	N/A	N/A	N/A

Specific Gravity	**1.003-1.013**	**N/A**	**N/A**	**N/A**
Glucose	**Negative**	**N/A**	**N/A**	**N/A**
Protein	**Negative**	**N/A**	**N/A**	**N/A**
Ketones	**Negative**	**N/A**	**N/A**	**N/A**
WBC	**Negative**	**N/A**	**N/A**	**N/A**
RBC	**Negative**	**N/A**	**N/A**	**N/A**
Leukoesterase	**Negative**	**N/A**	**N/A**	**N/A**

Cultures <mark>Highlight All Abnormal Labs</mark>—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	**Negative**	**N/A**	**N/A**	**N/A**
Blood Culture	**Negative**	**N/A**	**N/A**	**N/A**
Sputum Culture	**Negative**	**N/A**	**N/A**	**N/A**
Stool Culture	**Negative**	**N/A**	**N/A**	**N/A**

Lab Correlations Reference (APA):

Diagnostic Imaging

All Other Diagnostic Tests (10 points): N/A

Current Medications (10 points, 2 points per completed med)
5 <u>different</u> medications must be completed

Medications (5 required)

Brand/Generic	Alvimopan	Citalopram	Ertapenem	Metoprolol	Montelukast
Dose	12 mg	30 mg	1,000 mg	25 mg	10 mg
Frequency	Twice a day	Daily	Daily	Daily	Daily
Route	Oral	PO	IV Piggyback	Oral	Oral
Classification	Peripherally acting mu-opioid receptor antagonists	Selective serotonin reuptake inhibitor antidepressants, SSRIs	Carbapenems	Beta blockers	Systemic Leukotriene Antagonists
Mechanism of Action	Antagonizes the peripheral effects of opioids on gastrointestinal motility and secretion by competitively binding to gastrointestinal tract mu-opioid receptors.	Inhibition of CNS neuronal reuptake of serotonin.	Inhibits cross-linking of the peptidoglycan layer of bacterial cell walls by blocking a type of enzymes called penicillin-binding proteins.	Blocking catecholamine-induced increases in heart rate	Blocking the action of leukotriene D4 in the lungs resulting in decreased inflammation and relaxation of smooth muscle
Reason Client Taking	Patient is taking this medication to recover quickly after the bowel surgery.	Patient is taking this medication because his diagnosis gave him anxiety,	Patient is taking this medication because it treats abdominal infections and he had abdominal surgery and the incision did get infected	Patient is taking this medication to treat his hypertension.	Patient is taking this medication to help his airways stop narrowing due to anxiety.

			once.		
Contraindications (2)	**Hepatic disease Renal disease**	**Bipolar disorder, mania Anorexia nervosa**	**Head trauma Dialysis**	**Bradycardia Sick sinus syndrome**	**Alcoholism Jaundice**
Side Effects/Adverse Reactions (2)	**Flatulence Anemia**	**Teeth grinding Bone fractures**	**GI bleeding Confusion**	**Hypertension Heart failure**	**Dizziness Fatigue**

Medications Reference (APA):

U.S. National Library of Medicine. (2021, October 28). *Health information from the National Library of Medicine*. MedlinePlus. Retrieved November 2, 2021, from https://medlineplus.gov/.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Patient was alert and oriented to place, time, and name. Alert and Orientedx4. Patient was well-nourished and had no acute distress, and had clear speech.**
INTEGUMENTARY: **Skin color:**	**Patient skin was normal for race. Patient skin was dry, and intact, Patient skin was warm**

Character: **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y**☒ **N** ☐ **Type:**	**and skin turgor less than or equal to 3 seconds. Patient had no rashes, bruises. Patient had an incision on the left lower quadrant abdomen and Jackson-Pratt drain in the left lower quadrant abdomen and when I emptied the drain it contained 15 ml of sanguineous fluid.** **Braden score:20**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Patient's head is normocephalic. The neck appeared to be symmetrical with trachea at midline. Tympanic membrane were pearly gray, and had no visible drainage. Lymph nodes were not swollen. Patient has PERRLA, EOMI and normal conjunctiva, which is pink and moist. Patient does not have a deviated septum. Patient has great oral hygiene, tongue appeared pink with no sores and mucosa was moist and pink.** .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y** ☐ **N** ☒ **Edema Y** ☐ **N** ☒ **Location of Edema:**	**S1 and S2 heard. S3 & S4 not heard. Heartbeat was regular. Capillary refill was less than or equal to 3 seconds. Patient had no edema in any extremities. No jugular vein distention was observed.**
RESPIRATORY: **Accessory muscle use: Y**☐ **N** ☒ **Breath Sounds: Location, character**	**Patient had normal lungs sounds, Patient had 16 respirations while sitting up in bed. Patient had no chest deformities. Respirations were calm and regular. Patient denies mucous and coughing. No accessory muscles were used.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:**	**Patient stated his normal diet at home is usually three meals a day with some snacks throughout the day. Patient states his diet is the same in the hospital. Bowel sounds were active in all four quadrants. Patient height is 172.72cm and weight is 76kg. Patient denies nausea, vomiting, diarrhea. Patient has no distention, and scars. Patient has an incision in left lower quadrant abdomen. Patient has a Jackson-Pratt drain in the left lower quadrant**

Incisions:
Scars:
Drains:
Wounds:
Ostomy: Y ☐   **N** ☒
Nasogastric: Y ☐   **N** ☒
   Size:
Feeding tubes/PEG tube   Y ☐   **N** ☒
   Type:
	abdomen. The Jackson-Pratt drain contained 15ml of sanguineous fluid. Patient has no ostomy. Patient has no nasal gastric and no feeding tubes.

GENITOURINARY:
Color:
Character:
Quantity of urine:
Pain with urination: Y ☐   **N** ☒
Dialysis: Y ☐   **N** ☒
Inspection of genitals:
Catheter: Y ☐   **N** ☒
   Type:
   Size:
	Patient urine color is light yellow. Patient urine has no abnormal odor. Patient urinated a total of 500ml. Patient has no pain with urination. Patient is not on dialysis. Patient has no catheter.

MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y** ☐ **N** ☒ **Fall Risk: Y** ☐ **N** ☒ **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib)** ☒ **Needs assistance with equipment** ☐ **Needs support to stand and walk** ☐	**Neurovascular status is currently intact, and client has control of his senses. Client was able to display full range of motion in all his joints. Patient fall risk score is 20. Patient does not need assistance with activities of daily living. Patient is independent and does not need support to stand and walk.**
NEUROLOGICAL: **MAEW: Y** ☒ **N** ☐ **PERLA: Y** ☒ **N** ☐ **Strength Equal: Y** ☒ **N** ☐ **if no -** **Legs** ☐ **Arms** ☐ **Both** ☒ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Patient exhibits PERRLA. Patient is Alert and Orientedx4 and is calm and alert. Patient speech is clear. Patient moves all extremities well. Patient uses glasses.**
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:**	**Patient highest level of education is high school and three years of college. Patient lives in a house with only his wife. Patient is a**

Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):	Christian.

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
11:00am	60 Radial	133/83 Right Arm	16	35.6 Tympanic	96% Room Air

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
8:30am	Numerical 1-10	Abdomen	2	Dull and aching	Toradol and Norco

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Patient ate 80% of his breakfast. 90ml of apple juice, 240ml of coffee, 3 out of 6 pieces of toast, and 240ml of yogurt.	500ml

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis

Nursing Diagnosis	Rational	Intervention (2 per dx)	Evaluation
• Include full nursing diagnosis with "related to" and "as	• Explain why the nursing diagnosis was		• How did the patient/family respond to the nurse's actions?

evidenced by" components	chosen		• Client response, status of goals and outcomes, modifications to plan.
1. **Pain related to diverticulitis as evidenced by "dull and aching pain in abdomen" and 2 out of 10 pain on a numerical scale.**	**Patient has an abscess on sigmoid colon due to diverticulitis that required surgery and the patient still experiences pain when he has not had any pain medication to suppress the pain.**	**1.Torodol** **2.Norco**	**Goal is met because patient agreed that these interventions are working for him and he will continue these interventions even when he is discharged from the hospital**
2. **High risk of infection related to abdominal surgery related to diverticulitis as evidenced by wound.**	**Patient had abdominal surgery to remove abscess on sigmoid colon due to diverticulitis and now he has a wound with a Jackson-Pratt drain that is high risk for infection if not cleaned properly.**	**1. Patient should keep the wound clean and dry.** **2.Change bandage if it becomes dirty or wet.**	**Goal is met because patient agreed how important it is to maintain a clean and non-infected wound until the drain will be removed 10/28/21.**

Overall APA format (5 points):

Concept Map (20 Points):

Subjective Data

Patient states he has pain in his abdomen but uses Toradol and Norco for pain management.
Patient states his pain is a 2 on a numerical scale 1-10 when he uses Toradol and Norco.

Nursing Diagnosis/Outcomes

Pain related to diverticulitis as evidenced by "dull and aching pain in abdomen" and 2 out of 10 pain on a numerical scale.
Patient has an abscess on sigmoid colon due to diverticulitis that required surgery and the patient still experiences pain when he has not had any pain medication to suppress the pain.
High risk of infection related to abdominal surgery related to diverticulitis as evidenced by wound.
Patient had abdominal surgery to remove abscess on sigmoid colon due to diverticulitis and now he has a wound with a Jackson-Pratt drain that is high risk for infection if not cleaned properly.

Objective Data

VS: T: 35.6 Tympanic, R: 16, BP: 133/83 Right Arm, O2: 96% Room Air.
Fall Score: 20
Patient skin is dry and intact.
Patient has Jackson-Pratt drain in abdomen.

Patient Information

Patient is a 53-year-old man. Patient is married and lives in a house with his wife. Patient has a past medical history of Hypertension, and abscess of sigmoid colon due to diverticulitis.

Nursing Interventions

Toradol
Norco
Patient should keep the wound clean and dry.
Change bandage if it becomes dirty or wet.