N321 Care Plan #3

Lakeview College of Nursing

Anita Wilson

Demographics

Date of Admission 2/16/2021	**Patient Initials** B.H.	**Age** 61 years old (2/10/1960)	**Gender** Female
Race/Ethnicity Caucasian	**Occupation** Disability (Worked as a nursing assistant (for 16 years; retired for that) and business/ property rental owner (last 8 years)	**Marital Status** Married for 41 years; patient and husband share three children together	**Allergies** Celexa (swelling, high, allergy, 5/1/2018), Flagyl (tongue swelling, hives, high, 7/3/2018), Penicillin (hives, high, 5/1/2018), Sulfa antibiotics (hives, high, 5/1/2018), Morphine (hallucination, 2/16/2021), Codeine (hallucination, high, 2/16/2021) and Theophylline (shaky, high, 7/2/2021)
Code Status Full	**Height** 5’2”	**Weight** 195 pounds (88.5 kg) BMI: 35.67	

Medical History

Past Medical History: Patient has a past medical history of diverticulitis, fibromyalgia (5/1/2018), gastroesophageal reflux disease without esophagitis (5/1/2018), IBS, kidney stones, mild asthma with exacerbation (5/1/2018), other chest pain, other irritable bowel syndrome, PVCs, suppurative hidradenitis, and vitamin D deficiency

Past Surgical History: Patient has a past surgical history includes cholecystectomy (2/18/1983), eye muscle surgery (7/10/1974), tonsillectomy (12/26/1976), carpal tunnel release (1/26/1990), other surgical history (6/17/2000), lithotripsy (6/11/2002), labial adhesion lysis; cervix surgery; appendectomy; biceps tendon repair; colonoscopy and upper gastrointestinal endoscopy (7/10/2018).

Family History: Patient has a family history that includes alcohol abuse in her father; cancer in her mother, chronic obstructive pulmonary disease in her sister; heart disease in her father and sister; kidney disease in er father; pacemaker in her father.

Social History (tobacco/alcohol/drugs): Patient reports that she has never smoked. She has never used smokeless tobacco. She reports current alcohol use. She reports that she does not use drugs.

Assistive Devices: Patient denies the use glasses and hearing aids. Patient denies the use of a walker, wheelchair or cane. Patient uses both of dentures.

Living Situation: Patient lives with her husband in a three-story house. Patient has three children whom all live in Illinois within close proximity to her. Patient stated one of her children live 3 hours from her and lives often during the holidays pre-COVID era, whereas her other children live within an hour of her.

Education Level: Patient's education extends to some college. Patient stated she graduated from high school. Patient did state she did attend some college for approximately two years, but that was right after the graduated high school. Patient stated she then obtained her certified nursing assistant licenses and worked as a nursing assistant for roughly 30 years since she was 16 years old.

Admission Assessment

Chief Complaint: Abdominal pain

History of present Illness: B.H. is a 61 year old female with a past medical history of recurrent diverticulitis past many years, she says she has had left-sided abdominal pain for past 3 weeks, she was prescribed 10 days of ciprofloxacin and then she been taking levofloxacin for 7 days but it has shown no improvement, she continues to have worsening abdominal pain, that is located in the left lumbar and left lower quadrant it is pressure-like was initially radiating to her groin but is not non-radiating, worsening by bowel movement, partially relieved by lying on the left side and taking tramadol. Patient also complains of subjective feeling of fever and chills although she has been checking her temperature at home and highest read has been 99 F. she was nauseous today but has not had any vomiting. She does not have any cardiac history, does not have smoke history use or alcohol or any recreational drugs. Her diet mainly includes vegetable and meat. But for the past 3 weeks she has been taking liquid and soft diet. She had a cardiac street test done in 2018 which was normal. At her baseline she is able to walk without getting short of breath. This is not known diabetic and does not have hypertension. Her past surgical history includes open cholecystectomy.

Primary Diagnosis

Primary Diagnosis on Admission: Diverticulitis of large intestine without perforation or abscess without bleeding

Secondary Diagnosis: fibromyalgia, intermittent asthma, history of esophageal spasm, hidradenitis suppurative and GERD

Pathophysiology of the Disease, APA format: Diverticulitis

In diverticulosis, the bowel wall is weakened in multiple areas that form small outpouchings called diverticula. Diverticula often become inflamed, at which point the conditions becomes diverticulitis. This is a common condition that increases with age. Of these patients who has diverticulosis, it is said that “80% to 85% remain symptomatic (Capriotti, 2020). The complications include abscess formation. Patients with diverticulitis who do not have surgery have a recurrence rate of 20% to 35% (Capriotti, 2020). Both females and males are equal to getting this disease. Two main factors of diverticular disease are weakness of the bowel wall and increase intraluminal pressure. This occurs when intestinal contents block the diverticulum, thus cutting off the blood supply and providing an environment where infection can occur (Strate & Morris, 2019).

The most significant risk factor for diverticular formation is an individual who has a diet that is low in fiber. It is said to be linked to low fiber diet and obesity. There are also genetic factors as those with a family history tend to have an increased risk of diabetes. Weakness in the bowel muscles can occur where blood supply is at and enter the colonic wall which creates an area for bowel protrusion during periods of increased intra-abdominal pressure (Strate & Morris, 2019). When the bowel does not drain effectively, the contents become trapped inside and collect which then causes a mass to form which leads to an obstruction and irritation to occur within the

bowel. This all thereby leads to diverticulitis. This happening for an expended amount of time can cause scarring and narrowing of the bowel.

The signs and symptoms that are typically for a patient to present with depends on the how serve the inflammation is. It can be a dull, episodic or a steady left quadrant or middle abdominal pain. A fever, tachycardia, constipation, diarrhea, increased flatus and anorexia can also occur. On the other hand, a patient with this can also present with no physical signs on examinations. A tall tell sign of diverticulitis is left lower quadrant abdomen tender, fever and nausea. Hidden blood is the stool is also observed in patients with this.

An x-ray, CT scan, ultrasound or MRI is used to confirm cases of diverticulitis. Colonoscopy can also visualize the location of diverticula within the colon; however, it should not be done during acute diverticulitis (Capriotti, 2020). Treatment for this disease includes resting the bowel with a liquid diet and gradual reintroduction of a soft diet. Seven to ten days of antibiotic therapy and pain medications are also used. Recurrent attacks may result in progressive fibrosis and scarring causing the formation of a stricture. This is what my patient had which resulted in him needing to get surgery. The aim of surgery is to remove the diseased colonic segment while attempting to preserve the colonic integrity by creating a connection between two segments of the bowel (Capriotti, 2020).

My patient mentioned that she developed diverticulitis at the age of 40 years old and has been dealing with it for 21 years. B.H. goes on the mention that early on, their doctor wanted to intervene with surgery however with complications in her personal life, she did not see it as being a good time to get surgery. She stated her husband was also facing multiple health complications and scares like having a stroke and she did not deed it to be an appropriate time to get surgery. She continues to have flare up due to her being noncompliant with the

recommendation of surgery. According to the patient she believes the reasoning behind the development of her diverticula is because of her weight and her lack of exercise as well as her diet. I asked this patient prior to developing diverticula, how was her diet and she replied by stating “poor”. This patient denies having a diet high in fiber. Both obesity, lack of exercise as well as a diet low in fat can cause diverticulitis or increases one’s risk. This patient also presented to the ER with classic signs and symptoms of an inflamed diverticula like abdominal pain that persisted for several days and was descripted as being constant. She also presented with lower left side of the abdomen pain, fever and abdominal tenderness which are all typically signs and highly indicative of diverticulitis.

Pathophysiology References:

Capriotti, T. M. (2020). *Davis Advantage for Pathophysiology: Introductory Concepts and Clinical Perspectives 2nd Edition* (2nd ed., p. 562). Philadelphia: F A Davis.

Strate, L. L., & Morris, A. M. (2019). Epidemiology, Pathophysiology, and Treatment of Diverticulitis. *Gastroenterology*, *156*(5), 1282-1298.e1. https://doi.org/10.1053/j.gastro.2018.12.033

Laboratory Data

COMPLETE BLOOD COUNT

Lab	Normal Range	Admission Value 2/10/21 14:23	Today's Value 2/11/21 0906	Reason for Abnormal Value
RED BLOOD CELLS (carry oxygen)	F: 4.2-5.4	4.50	4.31	
HEMOGLOBIN (oxygen-carrying protein in RBCs)	F: 12-15.5	12.9	12.4	
HEMATOCRIT (the proportion of RBCs to the fluid component, plasma in your blood)	F: 36-44%	38.3	36.9	
PLATELETS (help with blood clotting)	150,000-450,000	251	229	
WHITE BLOOD CELLS (fight infection)	4,000-10,000	6.70	6.20	
NEUTROPHILS (type of WBC that the bone marrow creates; travel into blood stream and move to areas of infection and neutralize that area)	40-60	**67.6**	50.7	This patient's neutrophils are elevated because of her diverticulitis being infected. The neutrophil count may be high with infections, due to increased production in the bone marrow. There will usually be an elevated white blood cell (WBC) count and left shift, although patients with early and mild diverticulitis may have a normal WBC count. This result may be blunted in the elderly or immunocompromised.
LYMPHOCYTES (B cells: produce antibodies to attack bacteria T-cells: kill infected cells	20-40	20.8	37.0	
MONOCYTES	2-8	**10.9**	**10.3**	When monocytes are elevated it means the body

(fight infection; help remove dead tissues; destroy cancer cells)				is fighting something, typically an infection. A heightened percentage of monocytes in the blood is also caused by a chronic inflammatory disease such as inflammatory bowel disease which this patient has.
EOSINOPHILS (participating in immediate allergic reactions)	1-4	1.2	1.2	
BANDS (immature form of neutrophils; produced in excess during infection to help fight disease)	3-7	N/A	N/A	This lab was not shown within the patient's chart.

Chemistry

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
NA- (Control BP and blood volume; needed for muscle and nerves to work)	135-145	138	137	
K+ (helps your nerves to function and muscles to contract; heartbeat stay regular; move nutrients into cell and waste products out of cell)	3.5-5.0	4.4	3.9	
Cl- (helps keep the amount of fluid inside and outside of your cells in balance; maintain blood volume, BP and pH)	95-105	104	102	
CO2 (regulates the pH of blood,	23-30	24	27	

stimulates breathing, and influences the affinity hemoglobin has for oxygen)				
Glucose (for energy)	70-110	78	**112**	A reasoning for an increased glucose level could be stress from being hospitalization. Stress blocks your body from releasing insulin, and lets glucose pile up in your blood. If you're stressed for a long time, your sugar levels will keep building. Since this patient's blood sugar is slightly elevated or not too outside out normal range, it is likely due to stress.
BUN (measures the amount of nitrogen in your blood that comes from the waste product urea; indicates how well your kidney are working)	10-20	**7**	10	The reason for decreased levels of BUN levels for this patient is in directly correlation with her pain. Patient stated she presented to the ER only after the pain was persistent for a couple days. Patient stated while she was in pain, she barely ate or drank because of the increased and sharp left sided abdominal pain. She stated when she did try to eat or even drink, it would intensify the pain. With this being said, dehydration and lack of fluids over the past few days is the reasoning behind this decreased BUN level. Dehydration generally causes BUN levels to rise more than creatinine levels. This causes a high BUN-to-creatinine ratio. Kidney disease or blockage of the flow of urine from your kidney causes both BUN and creatinine levels to go up.
CREATININE (to be filtered and eliminated in urine)	0.6-1.5	0.74	0.91	
ALBUMIN (helps keep fluid in your bloodstream so it doesn't leak into other tissues)	3.5-5.0	4.2	N/A	
CALCIUM (stored in bones and teeth; supports structure; carries massages between the brain and body parts)	8.5-10.0	9.0	9.4	
MAGNESIUM (required for energy production)	1.5-2.5	N/A	N/A	This lab was now shown with in this patient's chart.

PHOSPHATE (build and repair bones and teeth, help nerves function, and make muscles contract)	2.8-4.5	N/A	N/A	This lab was now shown with in this patient's chart.
BILIRUBIN (orange-yellow pigment that occurs normally when part of your red blood cells break down)	0-0.3	**0.8**	**0.5**	This patient has a medical history of irritable bowel syndrome. Small intestinal bacterial overgrowth is directly associated with irritable bowel syndrome. This can cause microscopic mucosal inflammation and oxidative damage. Bilirubin is a marker of oxidant stress that is responsible for anti-oxidative activities.
ALK PHOS (mostly found in the liver, bones, kidneys, and digestive system. When the liver is damaged, ALP may leak into the bloodstream)	20-90	52	N/A	
AST Checks for liver damage	5-40	16	23	
ALT Test for liver cell damage	7-56	14	26	
Amylase Test for disease of the pancreas	30-110	N/A	N/A	This lab was now shown with in this patient's chart.
Lipase Helps your body digest fats; normal to have a small amount in body; protein that helps your body absorb fats (for pancreas)	0-160	21.42	15.9	
Lactic Acid Substance made by muscle tissue; high disrupt a person's acid pH balance; lactic acidosis caused by not enough oxygen in cells/ tissues	0.5-2.0	1.0	N/A	

Other Tests

Lab Test	Normal Range	Value on	Today's	Reason for Abnormal

		Admission	**Value**	
INR Measures the time for the blood to clot	0.8- 1.1 2-3 is therapeutic range for people of warfarin	N/A	N/A	This lab was now shown with in this patient's chart.
PT Monitor blood-thinning medicines	11-13.5 seconds	N/A	N/A	
PTT Screening test that helps evaluate a person's ability to form blood blots; number of seconds it takes for a clot to form in a sample of blood	25-35 seconds	N/A	N/A	
D-Dimer Blood test used to rule out a blood clot; protein fragment from the breakdown of a blood clot	Negative	N/A	N/A	
BNP Measures protein that is made by your heart and blood vessels (higher in heart failure)	Less than 100	N/A	N/A	
HDL Measures the level of good cholesterol in the blood	60	N/A	N/A	
LDL Measures the amount of "bad" cholesterol in the blood; increases risk of hardening of the arteries	Less than 100	N/A	N/A	
Cholesterol	Less than 200	N/A	N/A	
Triglycerides	Less than 150	N/A	N/A	
Hgb A1c	Below 5.7%	N/A	N/A	

Measures your average blood sugar levels over the past 3 months; commonly used to diagnose prediabetes and diabetes				
TSH Thyroid stimulating hormone; located near your throat; the thyroid makes hormones that regulate the way your body uses energy	0.4-4	N/A	N/A	

Urinalysis

Lab Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Reason for Abnormal**
COLOR & CLARITY	Colorless-Yellow, Clear	N/A	N/A	This lab was now shown with in this patient's chart.
pH	6-8.0	N/A	N/A	
SPECIFIC GRAVITY (test compares the density of urine to the density of water; help determine how well your kidneys are diluting your urine)	1.005-1.030	N/A	N/A	
GLUCOSE	Negative	N/A	N/A	
PROTEIN	0-8	N/A	N/A	
KETONES (fuels for the body that are made when glucose is	Negative	N/A	N/A	

in short supply)				
WBC	0-4	N/A	N/A	
RBC	0-3	N/A	N/A	
LEUKOESTERASE	Negative	N/A	N/A	

Cultures

Test	**Normal Range**	**Value on Admission**	**Today's Value**	**Explanation of Findings**
URINE CULTURE	Negative	N/A	N/A	This lab was now shown with in this patient's chart.
BLOOD CULTURE	Negative	N/A	N/A	This lab was now shown with in this patient's chart.
SPUTUM CULTURE	Negative	N/A	N/A	This lab was now shown with in this patient's chart.
STOOL CULTURE	Negative	N/A	N/A	This lab was now shown with in this patient's chart.

Diagnostic Imaging

All Other Diagnostic Tests:

Exam: CT Abdomen Pelvis W/ Contrast

Findings: acute uncomplicated diverticulitis of the mild to distal colon, similar in location and appearance to that seen on CT of March 2016. No localized perforation or abscess. Consider colonoscopy after resolution of the acute episode to exclude a possible underlying colonic mass lesion.

Acute uncomplicated diverticulitis with failed outpatient treatment x2: continue Levaquin 750 mg IV considering patient significant history to other antibiotics. General surgery on board, pending evaluation.

Abdomen

- Liver: Normal size and homogeneous parenchyma
- Gallbladder: Cholecystectomy. Mild central intrahepatic biliary dilation without extrahepatic dilatation.
- Pancreas: No mass or adjacent stranding. Normal caliber duct.
- Spleen: Normal
- Adrenals: normal
- Kidneys: normal enhancement. No calculi's, mass or hydronephrosis.
- Aorta: normal caliber.
- IVC: normal
- Lymph nodes: no abdominal or pelvic nodal enlargement.

Pelvis

- Reproductive organs: no pelvic mass
- Colon: extensive colonic diverticula with focal mural wall thickening of the lid to distal descending colon and pericolonic fat stranding most consistent with acute diverticulitis, similar in location and appearance to that seen on prior CT on arch 2016. No perforation or abscess.
- Small bowel: nodilation or wall thickening.
- Appendix: appendectomy
- Stomach and visualized esophagus: small sliding hiatal hernia.
- Mesentery: no fat stranding
- Peritoneum: no free fluid or free intraperitoneal air.

Diagnostic Test Correlation:

1. This exam was order for this patient to visualize the extent of her diverticulitis.

   Diverticula are identified on CT scans as outpouchings of the colonic wall. These

outpouchings may contain air, barium, or fecal material. The diagnosis of diverticulitis with CT scanning is based on the detection of colonic and paracolic inflammation in the presence of underlying diverticula.

Diagnostic Test Reference:

Imaging in Diverticulitis of the Colon: Overview, Radiography, Computed Tomography. (2020). *EMedicine*. https://emedicine.medscape.com/article/367320-overview

Current Medications

Brand/Generic	Acetaminophen (Tylenol)	Albuterol (Proventil,	Heparin (Porcine)	Lorazepam (Ativan)	Meropenem (Merrem)

		Ventolin)			
Dose	650 mg (tablet)	2 puffs	5,000 units	0.5 mg	100 mL
Frequency	Every 4 hours PRN	Every 4 hours PRN	Every 8 hours	Every 8 hours PRN	33.3 mL/ hr every 8 hours
Route	Oral	Inhaler	SubQ Injection	Oral (tablet)	IV
Classification	Analgesic, Antipyretics	Bronchodilators	Anticoagulants	Benzodiazepine	Antibiotics
Mechanism of Action	Inhibits the COX pathway in the central nervous system but not peripheral tissues	Acts on beta-2 adrenergic receptors to relax the bronchial smooth muscle. It also inhibits the release of immediate hypersensitivity mediators from cells, especially mast cells	Binds and accelerates the activity of antithrombin III, an enzyme which causes blood to clot by acting on a blood protein called fibrogen. It also inhibits coagulation factors Xa and IIa	Binds to benzodiazepine receptors on the postsynaptic GABA-A ligand-gated chloride channel neuron at several sites within the central nervous system (CNS). It enhances the inhibitory effects of GABA, which increases the conductance of chloride ions into the cell.	Exerts its action by penetrating bacterial cells readily and interfering with the synthesis of vital cell wall components, which leads to cell death. The bactericidal activity of meropenem results from the inhibition of cell wall synthesis.
Reason Client Taking	Mild pain or more severe pain, fever (since patient presented to ED with slightly fever)	Wheezing, short of breath	Prevent formation of blood clot while being hospitalized due to decrease mobility	Anxiety	To treat abdominal infections caused by bacteria; in this patient's case diverticulitis
Contraindications (2)	Acuter liver failure, caloric undernutrition, inflammation of the liver due to hepatitis c virus	Diabetes, ketoacidosis, hypertension, excess body acid, overactive thyroid gland	Bleeding, operation on the spine and eye surgery	Depression, seizures, glaucoma	Diarrhea, seizures, decreased blood platelets
Side Effects/Adverse Reactions (2)	Nausea, stomach pain, itching	Nervousness or shakiness, headache, throat or nasal irritation	Pain, bruising, fever, bleeding	Weakness or feeling unsteady, usual changes in mood or behavior	Constipation, headache or soreness, redness or swelling at the injection site
Nursing Considerations (2)	Consult physician if needed for longer than 10 days Avoid using multiple preparations containing acetaminophen	Listening to lung sounds Obtaining blood pressure and heart rate prior and during use of albuterol If patient has a productive cough, it's important to assess amount, color and consistency of sputum	Monitor for signs of bleeding Administer in subcutaneous tissue	Do not stop using this medicine suddenly, or you could have unpleasant withdrawal symptoms. Follow your doctor's instructions about tapering your dose. Store at room temperature away from moisture and	Observe intravenous site closely for extravasation. Observe for signs of renal, hepatic, or hematological dysfunction. Observe for skin rashes. Measure urine output.

				heat.	

Brand/Generic	**Tramadol (Ultram)**	**Prochlorperazine Edisylate (Compazine)**	**Fentanyl (Sublimized)**	**Levofloxacin (Levaquin)**	**Alprazolam (Xanax)**
Dose	50 mg	10 mg	25 mcg	750 mg	0.50 mg
Frequency	Every 6 hours PRN	Every 6 hours PRN	Every 8 hours PRN	Every 24 hours	Once daily PRN
Route	Oral (tablet)	Injection	IV	IV	Oral
Classification	Opioid	Phenothiazine	Opioid	Fluoroquinolone	Benzodiazepines
Mechanism of Action	It works by changing the way the brain and nervous system respond to pain.	Blocks postsynaptic dopamine receptors in cortical and limbic areas of the brain, thereby preventing the excess of dopamine in the brain.	Binds to opioid receptors, especially the mu opioid receptor, which are coupled to G-proteins. Activation of opioid receptors causes GTP to be exchanged for GDP on the G-proteins which in turn down regulates adenylate cyclase, reducing concentrations of cAMP. Reduced cAMP decreases cAMP dependent influx of calcium ions into the cell. The exchange of GTP for GDP results in hyperpolarization of the cell and inhibition of nerve activity.[6]	Involves inhibition of bacterial topoisomerase IV and DNA gyrase (both of which are type II topoisomerases), enzymes required for DNA replication, transcription, repair and recombination.	Acts on the brain and nerves to produce a calming effect and helps relieve panic and anxiety symptoms. It works by enhancing the effects of a certain natural chemical in the body (GABA)
Reason Client Taking	Mild or severe pain	Anxiety and nausea and vomiting	Severe pain	Bacterial infection (with this patient diverticulitis)	Anxiety
Contraindications (2)	Decreased function of the adrenal gland, drug abuse, depression, alcohol withdrawal, suicidal behavior	Low WBCs, alcoholism, parkinsonism	Liver disease and kidney disease	Diabetes, joint pain, allergies, mood disorder, seizure disorders	pre-existing respiratory depression, COPD or sleep apnea
Side Effects/Adverse Reactions (2)	Headache, nausea and vomiting, drowsiness, lack of energy	Dizziness, blurred vision, low blood pressure, agitation	Nausea, vomiting, redness and irritation of your skin, tiredness, feeling cold	Nausea, dizziness, lightheadedness, trouble sleeping	Light-headedness, tiredness, dizziness, drowsiness
Nursing	Dizziness,	Positioned nauseated	If you miss doses,	Watch for	Avoid alcohol and

Considerations (2)	sedation, drowsiness, impaired visual acuity (avoid driving or performing tasks that require alertness) Nausea, loss of appetite (lie quietly, eat frequent small meals). Report severe nausea, dizziness, severe constipation.	patients who have received prochlorperazine carefully to prevent aspiration of vomitus; may have depressed cough reflex. Older adult and emaciated patients and children, especially those with dehydration or acute illness, appear to be particularly susceptible to extrapyramidal effects. Be alert to onset of symptoms: Early in therapy watch for pseudo Parkinson's and acute dyskinesia. After 1–2 months, be alert to akathisia.	don't double up If you take too much, call 911!	seizures; notify physician immediately if patient develops or increases seizure activity. Assess heart rate, ECG, and heart sounds, especially during exercise. Report any rhythm disturbances or symptoms of increased arrhythmias, including palpitations, chest discomfort, shortness of breath, fainting, and fatigue/weakness.	other CNS depressants because of the increased risk of sedation and adverse effects Instruct patient to report severe or prolonged headache, blurred vision, rash, weight gain, or GI problems (nausea, vomiting, diarrhea, constipation)

Medications Reference (APA):

Institute for Safe Medication Practices: ISMP Medication Safety Alert

http://www.ismp.org/. Jones & Bartlett Learning. (2019). 2019 Nurse's Drug

Handbook. Burlington, MA

Assessment

Physical Exam

GENERAL:	Patient is an elderly Caucasian female. She appears to be alert and orientated to

Alertness: **Orientation:** **Distress:** **Overall appearance:**	situation and person, time and place. When asked what year and month it was, the patient answered correctly. Patient knew exactly where she was and for what. Patient denies use of devices like glasses and hearing aids or dentures. Patient denies the use of any other assistive devices like a walker, wheelchair or cane. Patient appears to be well groomed and in no acute distress, well-developed and not ill-appeared and awake. Patient was calm and cooperative. Patient appears stated age. Patient's mood and behavior is normal. Patient denies fatigue, weight changes, fevers, chills, night sweats at the time of this assessment.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type:**	Patient's skin is warm, pink and dry. No rashes or lesions or erythema. Patient has no drainage or bruises. Patient is not pale or ashy. Patient's nails are without clubbing and cyanosis. Skin turgor normal mobility, quick to return to original state. Patient had no wounds at the time of this assessment. Patient's Braden score is a 20 sensory perception 4 (no impairment), moisture 4 (rarely moist), activity 3 (walks occasional), mobility 3 (slightly limited), nutrition 3 (adequate), friction shear 3 (no apparent problem). **Patient denies rashes, lesions, non-healing sores, hair changes, purities.**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Patient's head and neck are symmetrical. Trachea is midline without deviations, thyroid is not palpable, no nodules noted at the time of assessment. Bilateral carotid pulses are palpable and strong. No swollen lymph nodes in the head or neck region. Bilateral sclera white, bilateral cornea clear. Bilateral conjunctiva pink, no visible discharge in eye bilaterally. Bilateral lids are pink and dry without lesion. PERRLA bilaterally, red light reflux present bilaterally. EOMs intact bilaterally. Septum is midline. Bilateral frontal sinuses are nontender and to palpation. Bilateral auricles moist and pink without lesions noted. Dentition is good, oral mucous overall is moist and pink without lesions noted. Patient denies use of dentures. Patient's hair is thick, short, white and even distribution. Oropharynx is clear. No discharge present right and left ear. External right and left ear normal. Normal range of motion and neck supple. Patient denies use of hearing aids. **Patient denies experiencing headaches, head injury, blurry vision, double vision, earache, drainage, nasal congestion, nose bleeds, nasal drainage, dry mouth, sore throat, swallowing difficulty at the time of the assessment.** **Glasgow coma scale 4 spontaneous (best eye response), 6 obeys command (best motor response), 5 oriented (best verbal response) total score is 15.**
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):**	Clear S1 and S2 sounds heard without the presence of murmurs, gallops or rubs. PMI at 5th intercostal space at MCL. All extremities warm, pink and dry. Peripheral pulses are 1+ throughout bilaterally. Patient does not present with edema bilaterally throughout. Capillary refill less than 3 seconds in fingers and

Peripheral Pulses: **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒ Edema Y ☐ N ☒** **Location of Edema:**	toes bilaterally throughout. No neck vein distention noted in this patient. Patient states she is often times short of breath with activity due to her COPD. Patient uses no oxygen and is currently on room air. **Patient denies chest pain, palpitations, diaphoresis, PND, Orthopnea, claudication.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	Respirations are regular, even and symmetrical and nonlabored bilaterally. Lung sounds are clear throughout bilaterally. No wheezes, crackles or rhonchi noted. Bilateral equal air entry. **Patient denies wheezing, cough, increase in sputum production. Anterior, lateral, clear and equal bilaterally.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	**Normal bowel sounds are present. Abdomen is soft, non-distended but moderately tender to left lower quadrant.** Patient is currently on a clear liquid diet while being hospitalized. This is because it will help alleviate symptoms by resting the digestive tract. At home this patient describes her diet as being "medium good". This patient states that although she is not the healthiest eater, both her and I's diet have changes dramatically especially since the multiple health scares they both have face over the past 20 years. This patient states she does not indulge in fried foods and this has helped with weight control, management and loss over the years. Patient states although she has increased her vegetable intake, she still has a problem with portion control. Patient is 5'2" and weights 195 pounds (88.5 kg) with a BMI of 35.67. This patient is considered obesity. Patient's abdomen is soft, flat, no masses noted upon light and deep palpation of all the four quadrants. Patient did express tenderness in her left lower and upper quadrant with deep and light palpation due to her diverticulitis. Bowel sounds are normoactive in all four quadrants. Patient swallows' food without difficulty and has no indicators of nutrition risks. Patient's last bowel movement was 2/17/21. Patient describes her bowel movement as being "hard, bumpy then soft". Patient stated her stool was a medium amount. Patient is passing flatus and tolerating clear liquid well. **Patient denies nausea, vomiting, diarrhea, abdominal pain, heartburn, jaundice, hematochezia, melena at the time of the assessment.** **Patient's last bowel movement was 2/17/21.**
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:**	Patient's urine appears to be yellow, clear and absent of foul odor. Patient has a normal stream of urine and consent flow. Patient's genitals appear to be intact, no abnormalities noted. Patient denies episodes of incontinence. Patient voids spontaneous without difficulty. Patient voided once during my shift and was not incontinent. Patient's urine was clear yellow, no malodor and not cloudy. Patient stated she has no difficulty urinating or starting urinary flow. Patient denies use of depend at night due to incontinence. **Patient denies burning or pain, hematuria, flank pain while urinating.**

Size:	
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐X** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	Patient appeared to be alert LOC. Patient arousal level was she opened her eyes spontaneously. Patient is a one assist with a walker. Patient demonstrated active range of motion bilaterally throughout. Patient fall risk score is a 2 (2 – mobility deficit/ weakness). Patient is fully independent both while being hospitalized and at home. Patient demonstrated active range of motion bilaterally throughout. Independent with ambulation, transferring, toileting, bathing, dressing, eating and communication and swallowing. Patient maintains good balance independently. Patient tolerated ambulation well. Patient showed no signs of difficulty breathing. Patient needed no cueing and set up assistance. Patient's general motor response was normal. Hand grip left and right strong, dorsiflexion left and right strong and plantar flexion strong.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient's speech was logical, well-paced, spontaneous and clear. Patient's mood and behavior was cooperative, calm and talkative. Patient's memory was normal. PERRLA bilaterally. Patient's hand grip and ankle strength were strong bilaterally. Patient is alert and orientated to situation and person, time and place. Patient is full concisions and alert. Patient displays no signs of confusion. CAM score negative. No acute, inattention, altered LOC, disorganized thinking.
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	Patient copes with anxieties, fears and concerns by breathing, staying in the moment and not stressing over everything. Patient's developmental level is appropriate for her age. Patient stated she is Catholic. Patient stated she attended church religiously every Sunday morning prior to COVID. Patient states she now worships from home. Patient stated her religion means a lot of her, as she grew up supported by religion. Patient lives in her husband of 41 years. Patient states she considers her three children and husband to be a part of her support team. Patient states her husband is very supportive through her pain and massages her while helps with reducing her pain.

Vital Signs

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0730	68 bpm (left radial)	144/69 (left arm; HOB 30)	18 (unlabored)	98.2 F (oral)	96% (room air)
1130	73 bpm (left radial)	134/80	18 (unlabored)	98.3 (oral)	97% (room air)

Pain Assessment

Time	Scale	Location	Severity	Characteristics	Interventions
0730	8/10	Left lower abdomen radiating to surrounding stomach area	Severe	Occasional, cramping, sharping	Relaxation techniques promoted; quiet environment facilitated; medication interventions
1130	0/10	N/A	N/A	N/A	Patient stated she is no longer feeling any pain since the administration of her medication. Patient states it was effective in controlling her pain.

IV Assessment

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	Placement date/ time was 2/16/21 at 0745. Location: medial cubital vein (antecubital fossa), right Gauge/ length: 20 gauge Indication/ daily review of necessity is for fluid therapy, medication therapy. Site preparation/ maintenance is depressing; dry and intact. Securement is secured with sterile tape strips. Single lumen patency/ maintenance is flushed without difficulty; flushed per policy. No signs or symptoms of phlebitis and infiltration.

Intake and Output

Intake (in mL)	Output (in mL)
Patient is on a strict intake and output. Patient drank 480 mL along with her breakfast. Patient is on a clear liquid diet. Patient in took 200 mL of meropenem (merrem) 1	**Patient voided twice through shift in bedside commode. Unmeasurable amount. Patient's urine was clear, yellow and feel of foul odor. Patient stated she**

g in sodium chloride 0.9% 100 mL IVPB – peripheral IV line.	**has no difficulties urinating or starting urine stream.**

Nursing Care

Summary of Care

Overview of care

Patient is independent and laid in bed a majority of the shift. Patient ambulated to the bedside commode prior to breakfast. Patient denies being short of breath. Patient was independent with morning care. patient's urine was yellow and clear with no foul odor present. Patient returned back to bed. Patient vitals were obtained approximately 0730 and again at 1130.

Continue gentle IV fluid hydration

Fentanyl 25 mg every 8 hours for pain.

Procedures/testing done:

Most of patient's lab values were within normal limits upon admission with the except of a few. Patient's BUN since being admitted has improved greatly. Upon admission, it was reported as being 7 and now is 10 which is still on the lower end of normal, but none the less has improved.

Complaints/Issues:

Patient complained of left sided abdominal pain and described it as being a 7/10 and sharp at approximately 0845. Pain medication was then given to this patient to control the pain. Shortly after, this patient reported a big decrease in pain, reporting it was now a 2/10. Patient stated the pain medication was effective.

Vital signs:

Patient's vital signs were slightly elevated, nurse was notified. With the exception of her morning blood pressure, all other vital signs for this patient were within normal range and stable. Patient's morning blood pressure that was taken at 0730 was 144/69 which is slightly elevated. The nurse stated she was not worried about it since it was not a major difference from her baseline but stated she will continue to monitor for it throughout the shift.

Tolerating diet, activity, etc.:

Patient ate her breakfast at approximately 0750 and then shortly after toileted herself independently. Patient required no assistance with feeding. Patient tolerated clear liquid diet well. Patient drank 450 mL of fluids during breakfast.

Physician notifications/ Future plans for patient:

The plan for this patient is to be discharge in 2-3 days after completion of antibiotics and if she continues to remain stabilized in her condition. Patient will be sent more with pain medication to effectively manage pain. Patient is also said to follow up with doctor post discharge. "She stated that her primary care provider has been treating her with oral antibiotics as

an outpatient for last two weeks. She states she initially was on cipro and now is on Levaquin and just finished a week's course of that. She states she is having worsening pain in left lower quadrant and now having nausea and vomiting. She states her stools are loose, but she has not been eating a lot food. Denies any known fevers or chills at home. She states she has a long history of diverticulitis for the past 20 years. She been talked about having surgery for removal but has not had this done. She states she has a long list of allergies and is only one Compazine for nausea. She states that fentanyl can tolerate however morphine makes her hallucinate. Pastoral care: patient shared waiting to talk with surgeon has been dealing with this for 20 years and now suspects surgery. Desired prayers for healing and strength and for possible procedure."

Discharge Planning

Discharge location:

Upon discharge, patient will be returning home with her husband.

Home health needs:

Patient will not require home health care upon discharge, as she is fully independent in her care.

Equipment needs:

Patient will not require equipment needs upon discharge.

Follow up plan:

Post discharge for this patient will include a follow up phone call along with follow up with primary doctor.

Education needs:

High fiber diet, deep breathing exercise to manage pain, when to seek medical attention for new symptoms, how to take new medications or home medications and side effects or changes, increase fluid to decrease mucous, follow medication regime to prevent readmission

Nursing Diagnosis

Nursing Diagnosis	Rational	Intervention	Evaluation
1. Acute pain **related to** presence and inflammation of diverticula, trauma to tissue, accumulation of fluid in abdominal/ peritoneal cavity, chemical irritation from toxins **as evidenced by** abdominal distention, verbalization of pain, rebound tenderness,	This is in relation to this patient because she has a history of fibromyalgia as well as presented to the ED on 2/16/21 with abdominal pain left-sided abdominal pain for past 3 weeks, she was prescribed 10 days of ciprofloxacin and then she been taking levofloxacin for 7 days but it has shown no improvement, she	1. Investigate pain r eports, noting location, duration, intensity (0–10 scale), and characteristics (dull, sharp, constant) throughout shift on 2/18/21 from 0700 to 1200. **2.** Provide comfort measures: massage, back rubs, deep breathing. Instruct in relaxation and visualization	**1.** Goal met. Patient report pain when asked to rate her pain from a scale of 1-10, 10 being the most severe on 2/18/21 by 1200. Patient reported her pain as being 8/10 and was administered pain medication to provide pain control. Shortly after, the pain reported her pain was now at a 0/10 and the pain medication was effective in controlling her pain in the left lower abdomen. Patient denies the pain now being cramping or sharp as previous stated.

	grimacing, reporting pain 7/10, described pain as being sharp and, history of fibromyalgia and diverticulitis, radiating pain, guarding sign of the abdomen and restlessness	continues to have worsening abdominal pain, that is located in the left lumbar and left lower quadrant it is pressure-like was initially radiating to her groin but is not non-radiating, worsening by bowel movement, partially relieved by lying on the left side and taking tramadol. At the time of admission, patient reported unrelieved pain after multiple attempts were made to decrease her pain were unsuccessful in doing so. The pain was sudden that appeared 3 weeks ago and is sharp in quality. Patient's pain lasted approximately 3 weeks which means it is acute.	exercises by 1200 on 2/18/21.	Patient demonstrated relief of pain as saying pain decreased, stable vital signs and absence of restlessness. 2. Goal met. Patient was able to verbalize the importance of deep breathing when pain occurs and how promotion of relaxation and enhances patient's coping abilities by refocusing attention on 2/18/21 by end of shift at 1200. Patient was offered a back rub with lotion to assist the pain, but patient refused.
2.	constipation **related to** inflammatory process of diverticulitis **as evidence by** inability to maintain normal bowel in the last	Not eating enough fiber causes a buildup of waste and constipation in the colon. Constipation puts extra strain on the walls of the colon. This increased	**1.** Encourage to increase oral fluid intake as tolerated, ideally at least 2L by the end of the day on 2/18/21 at 2400. **2.** Encourage fiber intake of at least 25	**1.** Goal partially met. I was unable to fully see this goal through being that the end of the shift for me was at 1200. While being there, this patient drank 480 mL of fluids for breakfast on 2/18/21 by 1200. I was

	3 weeks, irritability, pain in abdomen worsening by bowel movement, patient stated that, patient describes her bowel movement as being “hard, bumpy then soft”. Patient stated her stool was a medium amount	pressure causes the little pockets the diverticula to form in weak areas in your colon. This patient denies having a diet high in fiber which is a common cause of diverticulitis. This patient presented to the ED with a change in her bowel function that differs from her normal. Patient stated her last bowel, which was 2/17/21 was “hard”.	grams per day for women and as recommended by the dietitian by 1200 on 2/18/21.	not there to visual how much she drank for lunch as well as dinner. This patient was informed about the importance of maintaining adequate fluids. Patient was able to verbalize back that fluids are important to help soften the stool and make it easier to pass. 2. Goal met. Patient ordered prune juice as well as apple juice to help relieve and prevent constipation for lunch on 2/18/21 during my shift from 0700 to 1200. Apple juice and prune juice are both high in dietary fiber. Prune juice works as a laxative and can help maintain a healthy digestive system.
3.	deficient fluid volume **related to** fluid shift from extracellular into intestine, medically restricted intake, fever/ hypermetabolic state **as evidence by** patient is on a clear liquid and has been since admission 2 days ago, hypotensive, tachycardia upon admission, blood pressure	Fluid volume deficient is a major concern for this patient due to her being on a clear liquid diet and has been since admission on 2/16/21. Since being admitted and IV fluids being administer, this patient has improved fluid balance, adequate urinary output, stable vital signs, moist mucous membrane, good skin turgor and normal capillary	1. Monitor vital signs, noting presence of hypotension (including postural changes), tachycardia, tachypnea, fever throughout shift on 2/18/21 from 0700-1200. 2. Observe skin or mucous membrane dryness, turgor. Note peripheral and sacral edema throughout shift on 2/18/21 from 0700-1200.	**1.** Goal met. Patient’s vital signs were somewhat within normal range during shift on 2/18/21 from 0700-1200. At 0730 patient’s vitals were 144/69 (slightly elevated), pulse of 68 and respiration 18 and unlabored and temperature 98.2 and oxygen 96% on room air. Patient blood pressure was later taken at 1130 and was 134/80. This is within the patient’s normal range.

being 109/56 on admission and heart rate being 105 upon admission	refill less than 3 seconds bilaterally throughout. Patient did state that prior to admission, she was not drinking or feeding much because she was too much pain and foods and fluid especially would increase the pain in her left lower abdomen which is why the patient's BUN was also decreased but has since improved since admission.		2. Goal met. Patient did not display signs of dry skin or mucous membrane. Patient's skin and mucous membrane was intact and moist throughout. Patients did not present or display signs of edema bilaterally throughout both in upper and lower extremities.

Other References (APA):

Ackley, B. J., Ladwig, G. B., & Makic, M. B. (2017). Nursing diagnosis handbook: An evidence-based guide to planning care (11th ed.). St. Louis, MO: Elsevier

Concept Map

Subjective Data

- history of fibromyalgia
- presented to ED with abdominal pain that is left-sided for the past 3 weeks
- left lower quadrant it is pressure-like was initially radiating to her groin but is not non-radiating
- The pain was sudden that appeared 3 weeks ago and is sharp in quality. Patient's pain lasted approximately 3 weeks which means it is acute.
- Verbalization of pain 7/10
- Restlessness
- Patient did state that prior to admission, she was not drinking or feeding much because she was too much pain and foods and fluid especially would increase the pain in her left lower abdomen which is why the patient's BUN was also decreased but has since improved since admission.

Nursing Diagnosis/Outcomes

1. Acute pain **related to** presence and inflammation of diverticula, trauma to tissue, accumulation of fluid in abdominal/ peritoneal cavity, chemical irritation from toxins **as evidenced by** abdominal distention, verbalization of pain, rebound tenderness, grimacing, reporting pain 7/10, described pain as being sharp and, history of fibromyalgia and diverticulitis, radiating pain, guarding sign of the abdomen and restlessness

a. Goal met. Patient report pain when asked to rate her pain from a scale of 1-10, 10 being the most severe on 2/18/21 by 1200. Patient reported her pain as being 8/10 and was administered pain medication to provide pain control. Shortly after, the pain reported her pain was now at a 0/10 and the pain medication was effective in controlling her pain in the left lower abdomen. Patient denies the pain now being cramping or sharp as previous stated. Patient demonstrated relief of pain as saying pain decreased, stable vital signs and absence of restlessness.

b. Goal met. Patient was able to verbalize the importance of deep breathing when pain occurs and how promotion of relaxation and enhances patient's coping abilities by refocusing attention on 2/18/21 by end of shift at 1200. Patient was offered a back rub with lotion to assist the pain, but patient refused.

2. Deficient fluid volume **related to** fluid shift from extracellular into intestine, medically restricted intake, fever/ hypermetabolic state **as evidence by** patient is on a clear liquid and has been since admission 2 days ago, hypotensive, tachycardia upon admission, blood pressure being 109/56 on admission and heart rate being 105 upon admission

a. Goal met. Patient's vital signs were somewhat within normal range during shift on 2/18/21 from 0700-1200. At 0730 patient's vitals were 144/69 (slightly elevated), pulse of 68 and respiration 18 and unlabored and temperature 98.2 and oxygen 96% on room air. Patient blood pressure was later taken at 1130 and was 134/80. This is within the patient's normal range.

b. Goal met. Patient did not display signs of dry skin or mucous membrane. Patient's skin and mucous membrane was intact and moist throughout. Patients did not present or display signs of edema bilaterally throughout both in upper and lower extremities.

Objective Data

- clear liquid diet since admission 2 days ago
- hypotensive
- tachycardia upon admission (105 beats per minute)
- blood pressure 109/56 upon admission
- BUN level at 7 upon admission and now 10 when labs taken again at 2/18/21

Patient Information

B.H. is a 61 year old female with a past medical history of recurrent diverticulitis past many years, she says she has had left-sided abdominal pain for past 3 weeks, she was prescribed 10 days of ciprofloxacin and then she been taking levofloxacin for 7 days but it has shown no improvement, she continues to have worsening abdominal pain, that is located in the left lumbar and left lower quadrant it is pressure-like was initially radiating to her groin but is not non-radiating, worsening by bowel movement, partially relieved by lying on the left side and taking tramadol. Patient also complains of subjective feeling of fever and chills although she has been checking her temperature at home and highest read has been 99 F. she was nauseous today but has not had any vomiting. She does not have any cardiac history, does not have smoke history use or alcohol or any recreational drugs. Her diet mainly includes vegetable and meat. But for the past 3 weeks she has been taking liquid and soft diet. She had a cardiac street test done in 2018 which was normal. At her baseline she is able to walk without getting short of breath. This is not known diabetic and does not have hypertension. Her past surgical history includes open cholecystectomy.

Nursing Interventions

1. Encourage to increase oral fluid intake as tolerated, ideally at least 2L by the end of the day on 2/18/21 at 2400.

2. Encourage fiber intake of at least 25 grams per day for women and as recommended by the dietitian by 1200 on 2/18/21.

2a. Goal met. Patient's vital signs were somewhat within normal range during shift on 2/18/21 from 0700-1200. At 0730 patient's vitals were 144/69 (slightly elevated), pulse of 68 and respiration 18 and unlabored and temperature 98.2 and oxygen 96% on room air. Patient blood pressure was later taken at 1130 and was 134/80. This is within the patient's normal range.

2b. Goal met. Patient did not display signs of dry skin or mucous membrane. Patient's skin and mucous membrane was intact and moist throughout. Patients did not present or display signs of edema bilaterally throughout both in upper and lower extremities.