N431 Care Plan # 2

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	**Patient Initials**	**Age**	**Gender**
10/28/19	VM	72	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Causation	Disability	Divorced	Codeine, Chantix doxepin, & morphine
Code Status	**Height**	**Weight**	
Full	165	50.8 kg	

Medical History (5 Points)

Past Medical History:

- Adrenal Insufficiency
- GAD (General Axiety Disorder)
- History of Lung Cancer
- Insomnia
- MDD-
- PE
- Hypertention

Past Surgical History:

- Colonoscopy 4/30/19
- Esophagogastroduodenoscopy biopsy 4/29/19
- Phacoemulsification cataract with intraocular lens implanted on the left eye 11/01/18
- Aortic valve replacement
- Cholecystoctomy
- Hyperecotomy
- Illac artery stent, bare-metal

Family History:

The client's mother had COPD and stomach cancer and died at 80 years. The father had lung cancer and died at 46 years old.

Social History (tobacco/alcohol/drugs):

The client smoked for 18 years and smoked one pack a day and claims to smoke marijuana once a month. The patient doesn't drink because she doesn't like it. She might have one drink a year.

Assistive Devices:

The patient has a walker. However, she doesn't use it.

Living Situation:

The patient lives alone in an apartment alone. Her sister lives across the street and son lives 30 minutes away.

Education Level:

Two years of college and she got her LPN.

Admission Assessment

Chief Complaint (2 points):

Client had "SOB for the past week"

History of present Illness (10 points):

The patient's onset on the pain was going for a week: "I had SOB." The location is "chest" The duration of the pain is "constant" and relieved with medication "it took about an hour for the symptoms to go away." The client described her discomfort with the characteristics of "Labored." The associated with her symptoms, "Feels like I was going to pass out, and my arms and legs were numb and tingly." There wasn't much she could do to relieve the SOB but to lay down with the head elevated. The treatment used for SOB would go away when she would use DuoNeb and would take about 10 to 15 minutes.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable): The secondary diagnosis was not available

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

Infection is the most common cause of COPD exacerbation. This is a situation than can go on for months. It is a situation that is exact to each patint. There are a lot of details that

compose the individualiesed diease. There is the pathophysiology behind COPD, signs and symptoms that are exacerbated, diagnostic and lab tests, and then treatment for the cause if it can be detected.

The pathophysiological way to describe a COPD exacerbation need, to begin with, the intricate details of COPD itself. “COPD is characterized by poorly reversible airflow limitation caused by a combination of chronic bronchitis, emphysema, and the hyperactive airway disease” (Capriotti & Frizzel, 2016, p. 467). Emphysema consists of overused of alveoli that have trapped air and then causes difficulty with the expiratory airflow. The alveoli have decreased elasticity, and as a result, there is increased carbon dioxide in the lungs. “Chronic bronchitis irritates the secreting mucous glands and goblet cells to increase the number, leading to increased mucus production. Mucus plugging of the airway decreases the ciliary function. Bronchial walls also become thickened, further narrowing the bronchial lumen” (Hinkle & Cheever, 2018, p. 635).

An exacerbation of COPD is the aggravation of the manifestations of the disease. Often, exacerbations are generated from an infection in the lungs or airways. Also, the virus but can also be instigated by bacteria or other organisms. However, in some circumstances, the source can’t be recognized. “An exacerbation of COPD is defined as an event in the natural course of the disease characterized by acute changes in the patient’s respiratory symptoms beyond the normal day-today variations” (Hinkle & Cheever, 2018, p. 642). As a consequence, the lungs react to the infection and then progress into inflammation that decreases the airway from swelling, muscle tightness, and mucus. Furthermore, the COPD signs and symptoms are heightened.

The signs and symptoms with COPD exacerbation are individual and yet similar. The could be an increase in shortness of breath with shallow or rapid breathing (Wu, 2017). More than typical wheezing and a persistent cough (Wu, 2017). Their condition could include

confusion or sleepiness (Wu, 2017). My client had an increase in SOB and just wasn't feeling well overall. Her lungs had wheezing sounds on the antoir lobes. Her sputum was clear. There are some expected findings associated with the exacerbation.

The labs and vital signs with being similar to a COPD client, just increased. The x-ray will rule out issues and show the emphysema (COPD, 2017). The CT scan of the can rule out PE and detect the emphysema (COPD, 2017). Arterial blood gas analysis measures how well the lungs transport oxygen into your body and eliminate the carbon dioxide (COPD, 2017). So, an ABG would show lower levels of oxygen and increased carbon dioxide and increase bicarbonate. “Laboratory tests aren’t used to diagnose COPD but may be used to determine the cause of your symptoms or rule out other conditions” (COPD, 2017). The testing will help with determining the treatment.

Generally, the treatment for COPD exacerbation varies conditional on the person. Oxygen therapy is used at home and is given at 3 L. While at the hospital the respitory therapist increased the oxygen to 6 L because her oxygen level was at 89%. As a result, the clients oxygen level increased to 94% when I took the second set of vital signs. Then there is a list of medications of glucocorticosteroids, antibiotics for bacterial lung infections, antiviral medication for flu, bronchodilators, respiratory stimulants, and respiratory or ventilator support (Wu, 2017). The client was given DuoNeb for the exacerbation and also an azithromycin for profolactic reasons. The respiratory therapist usually helps determine what is needed, and with these patients. While taking care of the CPT vest given to break up the mucus so it can be excreted.

The client I worked with had a CT and an x-ray completed, Plus, a CBC, and arterial blood gas. The x-ray was clear and showed no pneumothorax or pleural effusion. The CT showed negative for PE. The reason they were checking for a PE was that the D-dimer was extremely

elevated. The ABG showed that her oxygen levels were low, and carbon dioxide and bicarbonate levels were increased.

COPD exacerbation is difficult for the patient. The difficulties that are associated with this problem are a lot of times unmagagable and need hospital attention. Treatment helps the releive the signs and symptoms to improve the breathing. There is the pathophysiology behind COPD, signs and symptoms that are exacerbated, diagnostic and lab tests, and then treatment for the cause if it can be detected. COPD is irreversalbe and the treament is going to contiune for the rest of this patients life.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2016). *Pathophysiology: introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis Company.

COPD. (2017, August 11). Retrieved from https://www.mayoclinic.org/diseases-conditions/copd/diagnosis-treatment/drc-20353685.

Hinkle, J.L., & Cheever, K. H. (2018). Brunner & Suddarth's Textbook of Medical-Surgical Nursing (14th ed.). Philadelphia, Pa: Wolters Kluwer Health Lippincott Williams & Wilkins.

Wu, B. (2017, February 4). Exacerbation of COPD: Causes, symptoms, and treatment. Retrieved from https://www.medicalnewstoday.com/articles/315611.php#3.

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value 10/28	Reason for Abnormal Value

RBC	Females: 4.2 to 5.4 million/uL Males: 4.7 to 6.1	NA	4.51	
Hgb	Females: 12 to 16 g/dL Males: 14 to 18 g/dL Elderly: levels slightly decreased	NA	**11.7 Low**	The hemoglobin is be slightly low because of nutritional deficiency (Pagana & Pagana, 2011).
Hct	Females: 37 to 47% Males: 42 to 52% Elderly: Levels slightly decreased	NA	36.6	
Platelets	150,000 to 400,000 mm^3	NA	198	
WBC	5,000 to 10,000/mm^3	NA	8.1	
Neutrophils	45%-75% (Normal Lab Values - Common Laboratory Values	NA	**91.6 High**	The neutrophils are increased because the client's lungs are inflamed due to the COPD exasperation (Pagana & Pagana, 2011).
Lymphocytes	20%-40% (Normal Lab Values - Common Laboratory Values)	NA	**10.1 Low**	The client's lymphocytes are decreased because the client had radiation therapy and is in remission from lung cancer (Pagana & Pagana, 2011).
Monocytes	**4.4-12%** (Normal Lab Values - Common Laboratory Values)	NA	6.8	
Eosinophils	Less than 7% (Normal Lab Values -	NA	5.3	

	Common Laboratory Values)			
Bands	< x 10^9/L (Normal Lab Values - Common Laboratory Values)	NA	NA	

Chemistry Highlight All Abnormal Labs—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-	136 to 145 mEq/L	NA	145	
K+	3.5 to 5.0 mEq/L	NA	4.5	
Cl-	98 to 106 mEq/L	NA	**109 High**	The client has elevated chloride in the blood because she has adrenal insufficiency (Pagana & Pagana, 2011).
CO2	21-34 (Normal Lab Values - Common Laboratory Values)	NA	30	
Glucose	70-105 mg/dL	NA	**140**	The client has elevate glucose because of the acute stress caused by the COPD exacerbation (Pagana & Pagana, 2011).
BUN	10-20 mg/dL	NA	22	
Creatinine	Females: 0.5-1.1 mgdL Males: 0.6-1.2 mg/dL (ATI)	NA	0.75	
Albumin	3.5 to 5 g/dL	NA	3.4	
Calcium	9.5-10.5 mg/dL (ATI)	NA	8.7	

Mag	1.3 to 2.1 mEq/L	NA	NA	
Phosphate	2.5-4.5 (ATI) (Cleveland Clinic Cancer).	NA	NA	
Bilirubin	0.3 to 1 mg/dL	NA	**0.2 Low**	The client has decreased bilirubin because of her medications. The client has insomnia and barbiturates, amongst other drugs, can cause decreased bilirubin (Pagana & Pagana, 2011).
Alk Phos	30 to 120 units/L	NA	86	
AST	0 to 35 units/L	NA	25	
ALT	4 to 36 units/L	NA	16	
Amylase	30 to 220 units/L	NA	NA	
Lipase	0 to 160 units/L	NA	NA	
Lactic Acid	0.4-2.3 (Normal Lab Values - Common Laboratory Values)	NA	NA	
Troponin	0-0.4 ng/mL (ATI)	NA	0.027	
CK-MB	3-5% or 5-25 IU/L (Cabaniss CD. Creatine Kinase)	NA	2.60	
Total CK	22-198 u/L ATI	NA	125	

Other Tests Highlight All Abnormal Labs—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
INR	0.8 to 1.1 (desired goal of 2 to 3 on warfarin therapy)	NA	NA	
PT	11 to 12.5 seconds, 85 to 100% or 1:1.1 client-control ratio	NA	NA	
PTT	30 to 40 seconds (1.5 to 2.5 times the control value if receiving heparin therapy	NA	NA	
D-Dimer	Less than 0.4 mcg/mL	NA	**3.02 High**	The client's lung cancer might have returned, and it has elevated the d-dimer because of malignancy (Pagana & Pagana, 2011).
BNP	>125 pg/mL for patients aged 0-74 years Less than 450 pg/mL if older (NT-proB-type Natriuretic Peptide)	NA	23	
HDL	More than 45 mg/dL (ATI)	NA	NA	
LDL	Less than 100mg/dL (ATI)	NA	NA	

Cholesterol	3-5.5 (Normal Lab Values - Common Laboratory Values)	NA	NA	
Triglycerides	50-150 (ATI) (Normal Lab Values - Common Laboratory Values)	NA	NA	
Hgb A1c	5.7% or less indicates not DM 7% indicated good control 8% to 9% fain DM control 9% or greater indicates poor control	NA	NA	
TSH	0.4-5.5 (Thyroid Blood Tests)	NA	NA	

Urinalysis Highlight All Abnormal Labs—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	Straw (Normal Lab Values - Common Laboratory Values)	NA	NA	
pH	4.6 to 8 (ATI)	NA	NA	
Specific Gravity	0.003-0.040 (Normal Lab Values -	NA	NA	

	Common Laboratory Values)			
Glucose	Less than 0.5 g/day(ATI)	NA	NA	
Protein	0.8 mg/dL (ATI)	NA	NA	
Ketones	None	NA	NA	
WBC	Males: 0-3 Females: 0-5 High-power field (ATI)	NA	NA	
RBC	0-5 (Urinalysis)	NA	NA	
Leukoesterase	None (Urinalysis)	NA	NA	

Arterial Blood Gas Highlight All Abnormal Labs—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
pH	7.35-7.45 (MedlinePlus Medical Encyclopedia)	NA	7.38	
PaO2	75-100 mm hg (MedlinePlus Medical Encyclopedia)	NA	**51.7 Low**	The client has mucus plugs in the lungs, which cause a decrease of PaO2 (Pagana & Pagana, 2011).
PaCO2	38-42 mm hg (MedlinePlus Medical Encyclopedia)	NA	**50.2 High**	
HCO3	22-26 mEq/L (ATI)	NA	**27.2 High**	The client has COPD, which can cause an increase of HCO3 (Pagana & Pagana, 2011).
SaO2	94%-100%	NA	87.8	

	(MedlinePlus Medical Encyclopedia)			

Cultures Highlight All Abnormal Labs—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	Straw (Normal Lab Values - Common Laboratory Values)	NA	NA	
Blood Culture	None (Blood Culture)	NA	NA	
Sputum Culture	None (Bacterial Sputum Culture)	NA	NA	
Stool Culture	Negative (Stool Culture)	NA	NA	

Lab Correlations Reference (APA):

Assessment Technologies Institute, LLC. (2017). *Pn adult medical surgical nursing: content mastery series review module*. Leawood, KS.

Bacterial Sputum Culture. (n.d.). Retrieved from https://labtestsonline.org/tests/sputum-culture-bacterial

Blood Culture. (n.d.). Retrieved from https://labtestsonline.org/tests/blood-culture

Blood gases: MedlinePlus Medical Encyclopedia. (n.d.). Retrieved from https://medlineplus.gov/ency/article/003855.htm.

Cabaniss CD. Creatine Kinase. In: Walker HK, Hall WD, Hurst JW, editors. Clinical Methods: The History, Physical, and Laboratory Examinations. 3rd edition. Boston: Butterworths; 1990. Chapter 32. Available from: https://www.ncbi.nlm.nih.gov/books/NBK352/

Cholesterol Levels: What You Need to Know. (2019, April 18). Retrieved from https://medlineplus.gov/cholesterollevelswhatyouneedtoknow.html.

Normal Lab Values - Common Laboratory Values. (n.d.). Retrieved from

NT-proB-type Natriuretic Peptide (BNP). (n.d.). Retrieved from https://my.clevelandclinic.org/health/diagnostics/16814-nt-prob-type-natriuretic-peptide-bnp

Pagana, K. D., & Pagana, T. J. (2011). *Mosbys diagnostic and laboratory test reference* (14th ed.). St. Louis, MO: Elsevier Mosby.

Stool Culture. (n.d.). Retrieved from https://www.uofmhealth.org/health-library/hw5738.

Thyroid Blood Tests. (n.d.). Retrieved from https://my.clevelandclinic.org/health/diagnostics/17556-thyroid-blood-tests.

Troponin. (n.d.). Retrieved from https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=167&contentid=troponin.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

CT scan was negative for a PE and was positive for emphysema. “A CT scan of your lungs can help detect emphysema and help determine if you might benefit from surgery for COPD. CT scans can also be used to screen for lung cancer and PE” (COPD, 2017). The patient had an elevated d-dimer of 3.02. “D-dimer is a susceptible and specific test for PE” (Pagana & Pagana, 2011). An irritant usually triggers the exacerbation in the lungs, and they needed to rule out a PE

with the D-dimer elevated. The chest x-ray may not display COPD until it is severe, the images may show distended lungs, bullae or a compressed diaphragm.

Diagnostic Test Correlation (5 points):

The chest x-ray confirmed emphysema. “A chest X-ray can show emphysema, one of the main causes of COPD. An X-ray can also rule out other lung problems or heart failure” (COPD, 2017). The x-ray also ruled out pneumothorax and pneumonia. Infections of the lungs, like pneumonia, are common triggers for COPD exacerbation. The x-ray discloses hyperinflation of alveoli and compressed diaphragm in the late conditions of emphysema.

CT scan was negiative for a PE with the patient has a history of.

Diagnostic Test Reference (APA):

COPD. (2017, August 11). Retrieved from https://www.mayoclinic.org/diseases-conditions/copd/diagnosis-treatment/drc-20353685.

Hinkle, J.L., & Cheever, K. H. (2018). Brunner & Suddarth’s Textbook of Medical-Surgical Nursing (14th ed.). Philadelphia, Pa: Wolters Kluwer Health Lippincott Williams & Wilkins.

Pagana, K. D., & Pagana, T. J. (2011). *Mosbys diagnostic and laboratory test reference* (14th ed.). St. Louis, MO: Elsevier Mosby.

Current Medications (10 points, 1 point per completed med)
10 different medications must be completed

Home Medications (5 required)

Brand/Generic	**Asprin/Acetylsalicylic Acid**	**Venlafaxine /Duloxetine**	**Incruse ellipta/Umeclidinium**	**Apo-Prednisone/Prednis**	**Lepressor/ Metoprolol**
Dose	325 mg	60 mg	62.5 mg	20 mg	12.5 mg
Frequency	Daily	Daily	Daily	Daily	BID

Route	PO	PO	Inhale	PO	PO
Classification	NSAID/Antipyretic; Antiplatelet	Antidepressant/ SNRI	Respiratory agent for COPD	Adrenal Corticosteroid	Antihypertensive/ Beta-Adrenergic antagonist
Mechanism of Action	Aspirin powerfully inhibits platelet aggregation. Reduces inflammation, pain, and fever. Also inhibits platelet aggregation, reduction ability of blood to clot.	Potentiates serotonergic and noradrenergic activity in the CNS.	Used to control and prevent symptoms caused by ongoing lung disease	Immediate-acting synthetic analog of hydrocortisone with predominantly corticosteroid properties	Beta-adrenergic antagonist with preferential effect on beta 1 receptors located primarily on cardiac muscle
Reason Client Taking	Prophylactic against thromboembolism	Major Depressive Disorder	COPD	Adrenal insufficiency	Manage Hypertension
Contraindications (2)	1. History of hypersensitivity to salicylate. 2.Acute bronchospasm	1.Concurrent administration of MAOI therapy or within 14 day of use 2.Alcoholism	1.Glaucoma 2.Alleries to milk proteins	1.Systemic fungal infections 2.Viral infections	1.Cardiogentic shock 2. Moderate to severe cardiac failure
Side Effects/Adverse Reactions (2)	1.Dizziness 2.Hemolytic anemia	1.Hot flashes 2.Metabolic: Decreased appetite and weight loss	1. Eye pain/swelling/redness 2.Difficult/ painful urination	1.Euphoria 2.Nausea	1.CNS: dizziness and fatigue 2. GI: nausea, heartburn, gastric pain.
Nursing Considerations (2)	1. Monitor for salicylate toxicity.	1. Ensure that a complete	1. Use the devise provided.	1.Be aware that older adult patients	1. Monitor BP, HR and ECG

	2. Monitor for loss in tolerance in aspirin.	list of medications is obtained 2. Monitor for S&S of numerous drug-drug interaction.	2. The medication is not treatment for acute bronchospasm.	and patients with low serum albumin are especially susceptible to adverse effects because of excess circulation free glucocorticoids 2. Watch for signs of hypocalcemia.	carefully during IV administration 2. Monitor I&O, daily weight; auscultate daily for pulmonary rales.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	GI pain in the stomach, aspirin can aggravate the ulcerations. Monitor for bleeding that will not stop. Aspirin will inhibit the platelet aggregation. In addition, check the medications given at the hospital to prevent VTE and verify with the prescriber if aspirin needs to be stopped during the use of anticoagulation medication.	Verify the medications prescribed do not interact with Duloxetine. MAOI therapy should not be given concurrent with Duloxetine.	Assess the patient medical history and verify that they are not using for asthma.	Monitor lab test: for serum electrolytes during long-term use for decreased calcium.	Take apical pulse and BP before administering to verify that the BP is not too low.
Client Teaching needs (2)	1. Avoid alcohol when	1. Do not abruptly	1. Teach patient to	1. Avoid or minimize	1.Learn how to take

	taking large doses of aspirin. 2. Maintain adequate fluid intake when taking repeated doses of aspirin.	discontinue taking this drug. 2.Avoid or minimize use of alcohol while taking this drug	take at the same time every day. 2. Teach the client about adverse effects.	alcohol, which may contribute to steroid-ulcer. 2. Do not use aspirin or other OTC drugs unless prescriber prescribes them.	radial pulse before each dose 2. Do not abruptly stop taking this drug. Sudden withdrawal can result in increase in anginal attacks.

Hospital Medications (5 required)

Brand/Generic	**Zithromax/ Azithromycin**	**DuoNeb/Ipratropium /albuterol**	**UCRIS/budesonide-formoterol**	**Abilify/Aripiprazole**	**Gabapentin/ Neurontin**
Dose	500 mg	3 mL	2 puffs	10 mg	300 mg
Frequency	Daily	Q 4 hr	BID	Daily	TID
Route	IV piggyback	Inhale	Inhale	PO	PO
Classification	Macrolide Antibiotic	Beta-Agonist/anticholinergic Bronchodilator	Adrenal corticosteroid Glucocorticoid; anti-inflammatory	Antipsychotic/ Dopamine system stabilizer	Anticonvulsant; Anti-epileptic Agent
Mechanism of Action	Reversibly binds to the 50S ribosomal subunit of susceptible	Selective beta2-adrenergic agonist that acts prominently on smooth	Anti-inflammatory action on nasal mucosa to be a result of decreased	Mediated through a combination of partial agonist activity at D2 and 5-HT	A GABA neurotransmitter analog; however, it does not

	organisms and consequentl y inhibits protein synthesis	muscles of the bronchi, uterus, and skeletal muscles Inhibiting acetylcholine at its receptor sites, thereby blocking cholinergic Broncho motor tone.	IgE synthesis and decreased arachidonic acid metabolism	receptor and antagonist activity at 5-HT receptors.	inhibit BABA uptake or degradatio n, It appear to interact with GABA cortical neurons, but the relationshi p to functional activity as an anticonvul sant is unknown.
Reason Client Taking	Prophylactic for potential infections	COPD exasperation	COPD exasperation	Major Depressive Disorder	Neuropath y
Contraindica tions (2)	1.History of jaundice 2.Hepatitis	1. Albuterol and levalbutrol hypersensitivit y. 2.Prolonged QT waves	1.Peptic ulcer disease 2.Hypersensi tivity to budesonide	1. Dementia related psychosis in elderly due to increased mortality 2.Suicidal ideation	1.Hyperse nsitvity to gabapentin 2.Suicidal ideation
Side Effects/Adve rse Reactions (2)	1.CNS: Headache 2.GI: N/VD	1.CNS: Tremors 2. Respiratory: bronchospasm	1.Arthralgia 2.CNS: dizziness	1. CNS: Anxiety 2. CV: Risk of stroke in elderly with dementia-relate psychosis.	1.CNS: Drowsines s and fatigue 2.Endocrin e: weight gain
Nursing Consideratio ns (2)	1.Monitor for prolonged QT interval, Brady arrhythmias 2.Monitor for and report loose	1.Monitor for sing and symptoms of fine tremor in finger 2.Monitor therapeutic effectiveness which is	1.Monitor I&O and report onset of oliguria 2.Monitor weight, BP, and pulse rate	1.Assess for and report orthostatic hypotension 2.Monitor for S&S of infection especially in elderly patients	1.Monitro for an report dizziness, somnolenc e, or other signs of CNS depression

	stools or diarrhea	indicated by significant subjective improvement in pulmonary function within 60-90 min after administration		with dementia	2. Monitor for changes in behavior that may indicate thoughts of suicide.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Assess the drug being used before given to patient. Azithromycin increases toxicity of digoxin. In addition, liver function test. ALT and AST will need to be assessed because the hepatic complication to verify it's not elevated.	Monitor lab tests: periodic ABCs, pulmonary functions, and pulse oximetry to see if the oxygen level is low.	Monitor lab test: periodic serum potassium for hypokalemia.	Monitor Lab test: periodic Hct, Hgb and blood glucose; periodic CPK and myoglobinuria if NMS is suspected; frequent CBC with history of low WBC or drug-induced low WBC.	Monitor for therapeutic effectiveness; may not occurs until several weeks following initiation of therapy. I would do a depression screening for suicidal ideations.
Client Teaching needs (2)	1. Direct sunlight exposure should be minimized. 2.Report onset of loose stools or diarrhea since pseudomembranous colitis needs to be ruled out	1.Avoid contract of inhalation drug with eyes 2. Do not increase number of frequency of inhalation without advice of prescriber	1.Do not drink grapefruit juice or eat grapefruit regularly 2. Notify the provider for any itching, or skin rash.	1. Report promptly deterioration of mental status or behavior. 2.Do not drive or engage in other potentially hazardous activities until reaction of drug is know	1. Do not take drug within 2 hr. of an antacid. 2. Do not drive or engage in other potentially hazardous activates until response to drug is

					known.

Medications Reference (APA):

Shields, K. M., Fox, K. L., & Liebrecht, C. (2018). *Pearson nurses drug guide 2018*. Boston: Pearson.

Assessment

Physical Exam (18 points)

GENERAL (1 point): **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	Patient exhibits no signs of impaired memory and is oriented to person, place, time, and situation. A & O x 4. Patient is awake and alert. Patient is responsive to stimuli. Patients speech is clear and regular.
INTEGUMENTARY (2 points): **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	The skin was normal pale pink and warm — no noted edema. Pulses were felt and were strong at 3+ each. There were some scratched to the lower and upper extremities. There was a reddened spot on her coccyx, no skin breakdown. The patient was wearing depends, and incontinence could be the cause. The was extremity pulses were all detected. No abnormal dermal sensations detected. Her handgrip strength was normal equal bilateral. The lower extremity flex strength was normal equal bilateral. Change of position every two hours is recommended for this patient. No rashes or drainage noticed during the inspection of the skin. The skin was dry — Braden scale on 20. The skin had good turgor with some tenting. There was a port present from the radiation given from lung cancer two years ago. The port was located on the left side of the chest. The last time it was flushed was 10/08/19.
HEENT (1 point): **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Hair is loose, gray, and evenly distributed. Eyes: Conjunctiva is pink; sclera is white. Pupils are 3 mm equal, round, and reactive to light with 2 step method bilaterally. Accommodation with convergence and constriction bilaterally. EOMs

	are intact bilaterally. Patient eyes had normal conjunctiva, no scleral icterus. The patient wears glasses that were left at home. Ears: Soft and no cerumen noticeable in both ears. Nose: No deviations present. The mucosa is pink and moist. The patient reports no nose bleeds. Mouth: Lips are symmetrical and dry. Oral mucosa is moist and pink. All teeth were missing, and she didn't have her dentures with her. Neck: Trachea appears midline. Thyroid was not palpable along with tonsillar, submandibular, and submental lymph nodes. No pulsations present bilaterally.
CARDIOVASCULAR (2 points): **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:**	Heart sounds were heard while auscultating in the aortic, mitral, tricuspid, Erb's point, and pulmonic. Heart sounds were heard clearly as Lub Dub. There wasn't a murmur or gallop detected. Capillary refill is less than 3 seconds except on the toenails were clubbed, and I couldn't see the cap refill. Radial, Brachial, carotid, popliteal, dorsal pedal, and tibialis posterior pulses were all felt and strong bilateral at 3+. No abnormal neck distention. No edema on all extremities.
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	Breathing is regular, with normal expansion seen on the left side. Posterior and anterior lung sounds: The RUL and LUL had diminished sounds. LLL and RLL had to wheeze on the posterior side. Mucous membranes are pink and moist. Nail beds on the hands showed no evidence of clubbing and are hard, smooth, and immobile. The capillary refill is less than 3 seconds bilaterally.
GASTROINTESTINAL (2 points): **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:**	The patient is on a heart-healthy diet. The abdomen is flat, soft, and non-tender when palpated — no masses or abnormalities. Bowel sounds were active in all four quadrants. The patient is normal weight and is 5'5" and 50.5 kg. No pain in the abdomen. No scars drain, or wounds seen at the time of assessment. The patient's last BM was in the morning and was normal. The patient wore protection for incontinence and did not have an ostomy. No feeding or nasogastric tubes were implemented.

Wounds: **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	
GENITOURINARY (2 Points): **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☐** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:**	Urine color is unknown. No pain when urinating. No Dialysis. No catheter was implemented.
MUSCULOSKELETAL (2 points): **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**☐	Her hand grip was normal bilateral. Foot flex was normal bilateral. She has a mobile with assistance and had good ROM. However, she classifies as a morse fall risk of 45. The patient has a walker at home. She is a standby with assistance.
NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	Patient exhibits no signs of impaired memory and is oriented to person, place, time, and situation. A & O x 4. Patient is awake and alert. Patient is responsive to stimuli. Patients speech is clear and regular. Pupils are 3 mm equal, round, and reactive to light with 2 step method bilaterally. Accommodation with convergence and constriction bilaterally . EOMs is intact bilaterally. Patient eyes had normal conjunctiva, no scleral icterus. Arms and legs were equal strength bilaterally. Speech was normal. Mental status was normal.

PSYCHOSOCIAL/CULTURAL (2 points): **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	The patient lives alone and has a service that helps her with shopping, showering, and cleaning three times a week. The patient knows that she cannot smoke cigarets and is coping well. She has two years of college and has a normal developmental level. She is a Christian. Her sister lives across the street, and her son lives 30 minutes away.

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7:43	**80**	**120/80**	**16**	**36.9**	**89%**
10:45	**74**	**110/54**	**18**	**36.5**	**94% This is normal for a patient that has COPD**

Vital Sign Trends:

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
7:45	**Numeric**	**No pain indicated**	**0/10**	**The patient said she had no pain.**	**No interventions indicated.**
10:40	**Numeric**	**No pain indicated**	**0/10**	**The patient said she had no pain.**	**No interventions indicated.**

IV Assessment (2 Points)

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.:**	The patient has a port implanted from two years ago on the left side of her chest. The dressing was clean, dry, and intact. There were no IV fluids given during my care. The was no signs of erythema or drainage.

IV dressing assessment:	

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
200 mL	**400 mL**

Nursing Care

Summary of Care (2 points)

Overview of care:

During the time I took care of the patient, I was able to watch the respiratory therapist modify the oxygen intake and give a CPT to loosen the mucus in the lungs. I got to vital signs, and the first time signaled the need for care from the respiratory therapist. I also had to get her blood pressure manually, and I needed to get it from the left arm instead of the right. Each time I tried to get the reading on the right, it showed extremely low BP. The nurse I followed had me go back and get VS manually. The second set of VS showed much better oxygen levels, and the treatment seemed to be working. During the second VS, I did a head to toe assessment and listened to her lungs, and there was wheezy sounding upon auscultation bilaterally on the posterior side. The medications given were all PO, and the Metropol need to be cut in half.

Procedures/testing done:

The procedure done was a CPT vest for 10 minutes to make it easier to cough up the mucus. The patient had the CPT done bedside.

Complaints/Issues:

The oxygen level was at 89% and according to the nurse I was assigned to that level needed to be higher while in the hospital. The patient was given a CPT and then increased the oxygen to 6 L via nasal canula.

Vital signs (stable/unstable):

The vital signs were stable. The oxygen levels were really low for the first set of VS. The oxygen level was considerably better in the second set.

Tolerating diet, activity, etc.:

The patient was on a heart-healthy, low sodium diet. There was no significant activity during the time of care.

Physician notifications:

There were no physician notifications provided during the time of care.

Future plans for patient:

The patient will continue not to smoke cigarrets. In addition, the patient will set aside periods of rest to help with her breathing.

Discharge Planning (2 points)

Discharge location:

The patient will leave with her younger sister within two days of admission to the hospital. She will return to her apartment, located in Oakland.

Home health needs (if applicable):

The patient will continue receiving help from the service she currently has three times a week. The number of visits from the help will increase if her condition worsens. The patient will continue not to smoke cigarrets.

Equipment needs (if applicable):

They will continue to use portable oxygen therapy at 3L. Also, the patient will use the walker all the time.

Follow up plan:

The patient will continue the follow the heart-healthy diet and take her COPD medications as prescribed.

Education needs:

The patient will be educated on the risk for falls and the impact a fall can have if it occurs.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

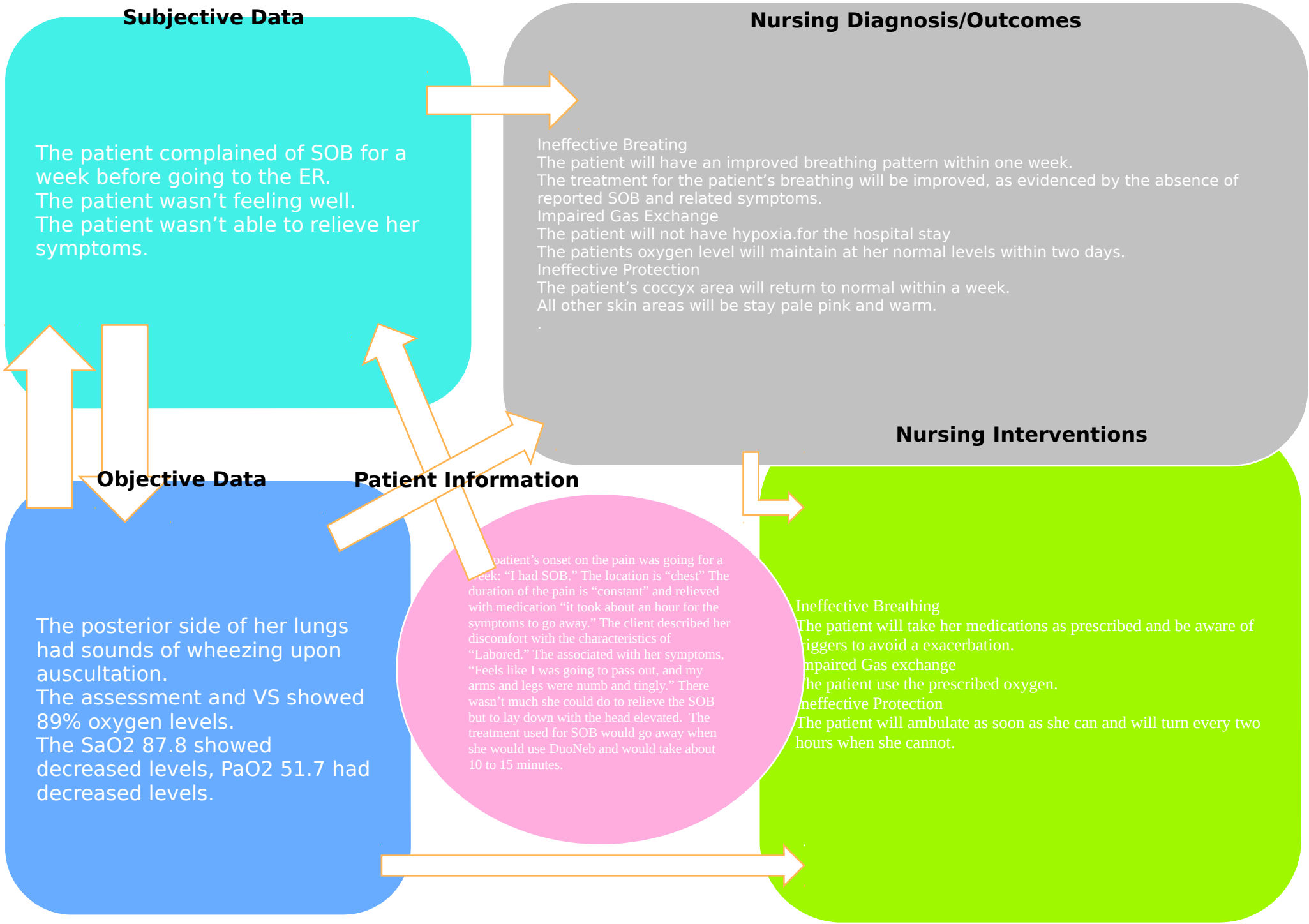
Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective breathing pattern related to ineffective inspiration and expiration occurring with chronic airflow low as evidence by COPD exacerbation.	The patients chief complaint was SOB that started a week ago.	1. Monitor pulse oximetry readings q2-4 hr. 2. Administer the bronchodilator as prescribed.	• The patient will have an improved breathing pattern within one week. • The treatment for the patient's breathing will be improved, as evidenced by the absence of reported SOB and related symptoms.
2. Impaired gas exchange related to altered oxygen supply occurring with small airway inflammation as evidenced by the SpO2 being at 89%, PaO2 at 51.7,	The patient was going treatment for her gas exchange from the respiratory therapist.	1. Assess for signs and symptons of hypoxia. 2.Deliver hymidified oxygen as prescribed, and monitor the patient's response.	• The patient will not have hypoxia. • The patients oxygen level will maintain at her normal levels.

and CO2 being at 50.2.			
3. Ineffective protections related to activity intolerance, as evidenced by sore on the coccyx.	The patient has been unable to have much activity due to the COPD exacerbation, and as a result, she has a reddened spot of her coccyx.	1. Turn patient q 2 hr. 2Assess the patient's skin for. tears, breaks, redness, or ulcers	• The patient's coccyx area will return to normal within a week. • All other skin areas will be stay pale pink and warm.
4. Activity intolerance related to an imbalance between oxygen supply and demand related to inefficient work of breath	The patient has not been able to breathe well for a week now, making it hard to have any activity. Also, the patient is using a lot of energy to breath not, giving her the energy to do activities.	1. Monitor the patient's respiratory response to activity, including assessment of oxygen saturations. 2. Allow at least 90 min between activities for undisturbed rest.	• The patent will report decreasing dyspnea during activity or exercise, and rated perceived exertion at three or less on a 0-10 scale within one week. • The rest between activities will help the patient perform more of her ADLs within one week.

Other References (APA):

Swearingen, P. L. (2015). *All-In-One Care Planning Resource*. Mosby.

Concept Map (20 Points):


Subjective Data
The patient complained of SOB for a week before going to the ER.
The patient wasn't feeling well.
The patient wasn't able to relieve her symptoms.
Nursing Diagnosis/Outcomes
Ineffective Breating
The patient will have an improved breathing pattern within one week.
The treatment for the patient's breathing will be improved, as evidenced by the absence of reported SOB and related symptoms.
Impaired Gas Exchange
The patient will not have hypoxia.for the hospital stay
The patients oxygen level will maintain at her normal levels within two days.
Ineffective Protection
The patient's coccyx area will return to normal within a week.
All other skin areas will be stay pale pink and warm.
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Nursing Interventions
Objective Data
The posterior side of her lungs had sounds of wheezing upon auscultation.
The assessment and VS showed 89% oxygen levels.
The SaO2 87.8 showed decreased levels, PaO2 51.7 had decreased levels.
Patient Information
patient's onset on the pain was going for a eek: "I had SOB." The location is "chest" The duration of the pain is "constant" and relieved with medication "it took about an hour for the symptoms to go away." The client described her discomfort with the characteristics of "Labored." The associated with her symptoms, "Feels like I was going to pass out, and my arms and legs were numb and tingly." There wasn't much she could do to relieve the SOB but to lay down with the head elevated. The treatment used for SOB would go away when she would use DuoNeb and would take about 10 to 15 minutes.
Ineffective Breathing
The patient will take her medications as prescribed and be aware of iggers to avoid a exacerbation.
mpaired Gas exchange
he patient use the prescribed oxygen.
neffective Protection
The patient will ambulate as soon as she can and will turn every two hours when she cannot.