

N311 Care Plan # 1

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission 10/13/2020	Patient Initials A.D.	Age 83	Gender Male
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Married	Allergies N.K.A.
Code Status Full	Height 5'6" (167.6 cm)	Weight 73.9kg (162lb 14.7 oz)	

Medical History (5 Points)

Past Medical History: Essential hypertension, dyspnea, hyperlipidemia, COPD, Acute Pulmonary Embolism, concussion injury, Nicotine dependence, Depression, Cataract Right eye, Polymyalgia

Past Surgical History: Colonoscopy, Amputation (finger Rt. 2nd tip), Left Knee Surgery, Cystectomy

Family History: None on File

Social History (tobacco/alcohol/drugs): Former Smoker (quit 1/1/1970); No alcohol use. No illicit drug use.

Admission Assessment

Chief Complaint (2 points): Ineffective Airway Clearance r/t COPD exacerbation as evidenced by "I'm having trouble breathing".

History of present Illness (10 points): Onset: On October 13, 2020, this 83 year old caucasian male presents to the emergency room at St. Anthony's Memorial Hospital for symptoms of shortness of breath. He states he has "Trouble breathing". **Location:** Upper abdominal area/bilateral lungs. **Duration:** He states that on September 22nd, he was seen in the Emergency Room at HSHS St. Anthony's, for a fall against some farm equipment which resulted as an injury to the right posterior chest wall. **Characteristics:** The patient states on the Wong-Baker Pain Scale, he rates his pain as an 8-9 out of 10. **Aggravating Factors:** Inhaling and exhaling air make his upper abdominal area hurt worse. Laying down flat and coughing also aggravate

this as well. **Relieving Factors:** Nothing really relieves the pain. **Treatment:** The patient states he has not tried any treatment towards the shortness of breath. He does not use oxygen at home.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Bilateral Pulmonary Embolism

Secondary Diagnosis (if applicable): COPD Exacerbation

Pathophysiology of the Disease, APA format (20 points): A pulmonary embolism is a clot that has traveled to the pulmonary arterial circulation and caused obstruction of arterial blood flow through the lungs. Usually the embolism has originated in the venous circulation as a deep vein thrombus in the leg or in the right side of the heart as an atrial thrombus. Thrombi also often form around central venous catheters and travel to the right side of the heart into the pulmonary artery. PE is the leading cause of death because the clinical presentation is often vague and occurs without warning. Most cases are diagnosed at autopsy because the patient did not demonstrate symptoms. (Capritotti 2015). A pulmonary embolism (PE) is when a blood clot (thrombus) becomes lodged in an artery in the lung and blocks blood flow to the lung. PE's arise from the thrombus that originates in the deep venous system of the lower extremities; however, it rarely also originates in the pelvic, renal, upper extremity veins, or the right heart chambers. After traveling to the lung, a large thrombi can lodge at the bifurcation of the main pulmonary artery or the lobar branches and cause hemodynamic compromise (Medscape.com). The symptoms a patient may have with a PE are cough, dyspnea, or stridor. Upon assessment, the patient may present with cough, dyspnea, stridor, pink frothy sputum, coarse loud crackles in both lung fields. The diagnosis would be a chest x-ray; however, a cardiac catheter can show poor LV ejection fraction lower than 40%. High pulmonary capillary wedge pressure is caused

by backward pressure from left ventricle. The treatment would be oxygen, diuretics to decrease fluid in the lungs, digitalis to enhance cardiac contractility, ACE inhibitors to decrease RAAS effects in heart failure. My patient presented to the emergency room with the symptoms of shortness of breath or dyspnea. Upon assessment, he was also found to have dyspnea. He was examined with a chest x-ray which showed the infiltrates in his lungs, bilaterally which showed a PE. He is also noted to have a traumatic injury on September 22nd of this year to his right chest wall area of his body.

Chronic Obstructive Pulmonary Disease (COPD) is a combination of chronic bronchitis, emphysema, and hyperreactive airway disease. It is characterized by the features of the three disorders. The characteristic features of chronic bronchitis is hypersecretion of the mucus in the large and small airways, hypoxia and cyanosis. Excessive mucus creates obstruction to inspiratory airflow that inhibits bronchitis, the individual has to have had a cough for 3 months out of the year for 2 consecutive years. COPD is the third leading cause of death in the United States and a leading cause of disability. (Capriotti, 2015). COPD is one of the most serious and disabling conditions in middle-aged and elderly Americans. Cigarette smoking is implicated in 90 percent of cases and, along with coronary artery disease, is a leading cause of disability. COPD has a major impact on the families of affected patients. Caring for these patients at home can be difficult because of their functional limitations and anxieties about air hunger. Furthermore, patients with COPD can have frequent exacerbations that often require medical intervention. Ultimately, caregivers may have the burden of considering end-of-life decisions. (aafp).

Pneumonia is most commonly caused by inhalation of droplets containing bacteria or other pathogens. The droplets enter the upper airways and gain entry into the lung tissue. Pathogens

adhere to the respiratory epithelium and stimulate an inflammatory reaction. The acute inflammation spreads to the lower respiratory tract and alveoli. At the sites of inflammation, vasodilation occurs with attraction of neutrophils out of capillaries and into the air spaces. There is excessive stimulation of respiratory goblet cells that secrete mucus. Mucous and exudative edema accumulate between the alveoli and capillaries. The alveoli attempt to open and close against the purulent exudate; however, some cannot open. The sounds heard with the stethoscope over the alveoli opening against the exudative fluid are crackles. There is a layer of edema and infectious exudate at the capillary-alveoli interface that hinders optimal gas exchange. The patient can become hypoxic and hypercapnic, with obstructed exchange of O₂ and CO₂ at the pulmonary capillaries. (Capriotti, 2015). Pneumonia is an infection of the lungs that may be caused by bacteria, viruses, or fungi. The infection causes the lungs' air sacs (alveoli) to become inflamed and fill up with fluid or pus. That can make it hard for the oxygen you breathe in to get into your bloodstream. (lung.org). The patient smoked for many years, although his chart does not mention how many packs per day he smoked, he did quit in 1970.

Pathophysiology References (2) (APA):

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

DanielR. Ouellette, M. (2020, September 18). *Pulmonary Embolism (PE)*. Retrieved October 17, 2020, from <https://emedicine.medscape.com/article/300901-overview>.

Hunter, M., & King, D. (2020). *COPD: Management of Acute Exacerbations and Chronic Stable Disease*. Aafp.org. Retrieved 31 March 2020, from <https://www.aafp.org/afp/2001/0815/p603.html>.

Laboratory Data (20 points)

If laboratory data is unavailable, values will be assigned by the clinical instructor

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	Reason for Abnormal Value
RBC	3.90-4.98	4.83	4.34	
Hgb	12.0-15.5	15.6	14	Slightly abnormal upon admission, due to dyspeana.
Hct	35-45	46.5	42.5	High upon admission due to producing too many red blood cells which indicate heart or lung disease.
Platelets	140-400	208	184	
WBC	4.0-9.0	4.7	4.8	
Neutrophils	*	80.9	67.9	
Lymphocytes	*	12.8	16.4	
Monocytes	*	4.9	12.0	
Eosinophils	*	0.4	2.1	
Bands	*	N/A	N/A	

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 Value
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Na-	135-145	140	140	
K+	3.5-5.1	3.4	4.1	
Cl-	98-107	105	110	Chloride would be high at check due to possible dehydration.
CO2	22-29	30.0	27.0	CO2 would be high because of impaired gas exchange in the body.
Glucose	70-99	126	79	Glucose may be high due to eating right before presenting the hospital.
BUN	6-20	20	20	
Creatinine	0.50-1.00	1.02	0.74	
Albumin	3.5-5.2	3.3	N/A	Low due to chronic inflammatory responses.
Calcium	8.4-10.5	9.0	8.5	
Mag	*	N/A	2.4	
Phosphate	*	N/A	N/A	
Bilirubin	0.3-1.0	0.5	N/A	
Alk Phos	35-105	188	N/A	High due to possibility of a PE

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	Unable to Obtain	Unable to Obtain	Unable to Obtain	
pH	*	*	*	
Specific Gravity	*	*	*	
Glucose	*	*	*	
Protein	*	*	*	

Ketones	*	*	*	
WBC	*	*	*	
RBC	*	*	*	
Leukoesterase	*	*	*	

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	Unable to Obtain	Unable to Obtain	Unable to Obtain	
Blood Culture	Type & Cross Match	*	*	No Growth in 2 days.
Sputum Culture	*	*	*	
Stool Culture	*	*	*	

Lab Correlations Reference (APA):

Pagana, K., Pagana, T., & Pagana, T. *Mosby's diagnostic and laboratory test reference.*

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

CTA Chest – for pulmonary embolus – Findings: 1. Small pulmonary emboli bilaterally. Overall low clot burden. 2. No evidence of right heart strain. 3. Persistent indeterminate 12 mm nodule within the right upper lobe. 4. Nondisplaced right 11th rib fracture.

Lower Extremity Venus Duplex – Findings: Total occlusion of the mid posterior tibia veins suggestive of age.

XR of Rt Ribs and PA Chest – Findings: Impression at the time was developing infiltrates or atelectasis overlying long base. No convincing acute rib Fx by plain film evaluation . Patient has developed difficulty breathing and cough – also extensive bruising on right posterior chest wall and to right side of abdomen. Patient sates he is a farmer and has a hard time “getting air” outside while working. Denies fever, chills, or trauma.

Brand/Generic	Tylenol	Xanax	Eliquis	Atorvastatin	Carvedilol
Dose	650mg	0.5mg	15mg	10mg	6.25mg
Frequency	Q4 /PRN	BID	BID	Once per night	BID
Route	Oral	Oral	Oral	Oral	Oral
Classification	Nonsalicylate, paraminophenol derivative	Benzodiazepine	Factor Xa inhibitor	HMG-CoA reductase inhibitor	Nonselective beta blocker and alpha-1 blocker
Mechanism of Action	Inhibits the enzyme cyclooxygenase, blocking prostaglandin production and interfering with pain impulse generation in the peripheral nervous system.	May increase effects of gammaminobutyric acid (GABA) and other inhibitory neurotransmitters by binding to specific benzodiazepine receptors in cortical and limbic areas of the CNS, GABA inhibits excitatory stimulation, which	Inhibits free and clot-bound factor Xa and prothrombinase activity. Although apixaban has no direct effect on platelet aggregation, it does indirectly inhibit platelet aggregation induced by thrombin.	Reduces plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and by increasing the number of LDL receptors on liver cells to enhance LDL uptake and breakdown.	Reduces cardiac output and tachycardia, causes vasodilation, and decreases peripheral vascular resistance, which reduces blood pressure and cardiac workload

		helps control emotional behavior			
Reason Client Taking	Mild Pain	Anxiety	Blood Thinner	Hyperlipidemia	Hypertension
Contraindications (2)	Severe hepatic impairment, severe active liver disease	Acute angle-closure glaucoma; hypersensitivity	Active pathological bleeding, severe hypersensitivity to apixaban or its components	Active hepatic disease, unexplained persistent rise in serum transaminase level	Asthma or related bronchospastic conditions; severe bradycardia
Side Effects/Adverse Reactions (2)	Pulmonary edema, Hypotension	Agitation, confusion	Excessive bleeding, Hemorrhagic stroke	Arrhythmias, thrombocytopenia	Angina, Interstitial pneumonitis

**Current Medications (10 points, 2 points per completed med)
*5 different medications must be completed***

Medications (5 required)

Medications Reference (APA):

Jones & Bartlett Learning. (2020). *2020 Nurses drug handbook*. Burlington, MA.

Assessment

Physical Exam (18 points)

GENERAL: Alertness: Orientation: Distress: Overall appearance:	Alert and oriented to time, place and person X3 Does not appear in distress Awake, well-groomed wearing a hospital gown
INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises:	Ecchymotic Smooth, fair Warm, dry Tenting None Multiple bruises present

<p>Wounds: . Braden Score: Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Wound on Right Buttocks, purple echymotic. Skin tear on posterior right elbow Braden Score 15</p>
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>Head and neck symmetrical, normal cephalic, patients ears have some cerumen build-up, difficulty hearing no hearing aids present, eyes symmetrical EOM, nose symmetry, no deviation, no dentures present Right eye – impaired vision, Left eye – impaired vision, Right ear – impaired hearing, Left ear – impaired hearing</p>
<p>CARDIOVASCULAR: Heart sounds: S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): Peripheral Pulses: Capillary refill: Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p>	<p>Heart sounds normal S1 and S2, no murmurs, no gallops or rubs detected in S3 or S4. Capillary refill is less than 3 seconds. However, clubbing is present. Peripheral pulses diminished slightly. JVD present.</p>
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>Air entry equal bilaterally, vesicular breath sounds, no crepitations rhonchi or wheeze</p>
<p>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 <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/></p>	<p>Regular diet at home, regular diet at the hospital</p> <p>66” tall 162 lb Bowel sounds are normoactive in all 4 quadrants, passing flatus 1 days ago No CVA tenderness No abnormalities found upon inspection for distention, incision, scars, drains</p> <p>Wound on Right Buttocks, purple echymotic. Skin tear on posterior right elbow</p>

<p>Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	
<p>GENITOURINARY: Color: Character: Quantity of urine: Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p>	<p>Yellow, Clear, normal Voided x 3</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Fall Score: Activity/Mobility Status: Independent (up ad lib) <input type="checkbox"/> Needs assistance with equipment <input checked="" type="checkbox"/> Needs support to stand and walk <input checked="" type="checkbox"/></p>	<p>Normal ROM Strength in both upper and lower extremities Straight cane, walker, gait belt Strength in all extremities bilateral Needs help with bath, but can dress himself, slow and weak Fall risk due to weakness, O2 nasal cannula 15 Up with 1 assist with gait belt and walker N/A Yes Yes. Patient up with 1 assist with gait belt and walker, unsteady gait.</p>
<p>NEUROLOGICAL: MAEW: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input checked="" type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:</p>	<p>Cognitive of time, place and person X3 Articulative speech Alert to sensory touch</p>
<p>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):</p>	<p>Has wife of 62 years that he lives with independently at home. Mature None Patient lives in a ranch style home with his wife and does have two to four steps when entering the home.</p>

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
11:00am	68 BPM	112/70 mmHG (left arm)	18	97.7 orally	100% on 2L Nasal Cannula

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
9:10am	8/10	Right Buttocks	Constant/ throbbing	Waxing/waning	Tylenol around the clock/ donut pillow for buttocks while sitting in chair

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
740mL oral coffee/milk (500mL coffee/ 240mL milk)	Urine output: voided 3 times.
700mL oral water	325 mL out
Toast, scrambled eggs, sausage – ate half of breakfast	550 mL out
Total of 1680mL intake	200 mL out
	Total of 1075mL output via urine

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

<p>Nursing Diagnosis</p> <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components 	<p>Rational</p> <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	<p>Intervention (2 per dx)</p>	<p>Evaluation</p> <ul style="list-style-type: none"> • How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
<p>1. Ineffective airway clearance r/t COPD exacerbation, and increased anxiety as evidenced by “I’m having trouble breathing”</p>	<p>The inability to clear secretions or obstructions from the respiratory tract to maintain a clear airway. Which, increased production of secretions causes shortness of breath, crackles, and difficulty breathing patterns</p>	<p>1.Continue oxygen therapy for duration of hospital stay</p> <p>2.Sit patient up in high fowler’s position while patient is awake in the hospital. Administer Xanax, 0.5mg BID on time.</p>	<p>1.Goal met. O2 is being monitored as well as pulse ox.</p> <p>2.Goal met. Patient sitting up in recliner for at least 2 hours in the morning. Patient sitting up at a 90 degree angle while in bed. Patient also receiving Xanax BID on time.</p>
<p>1. Imbalanced energy field r/t fatigue</p>	<p>Due to pt having bilateral pulmonary embolisms</p>	<p>1. Chest XR Ordered.</p> <p>2.Administer Factor XA inhibitor on time when due, 15 mg BID</p>	<p>1.Goal met. Patient completed CXR, determining bilateral PE’s.</p> <p>2. Goal met. XA inhibitor medications administered on time BID, 15mg.</p>

Other References (APA):

Concept Map (20 Points):

Subjective Data

Pt states “ I have trouble breathing” “When I sit up high, I am able to breathe better. Also, with the oxygen, it helps”

Nursing Diagnosis/Outcomes

Ineffective airway clearance r/t COPD exacerbation, and increased anxiety as evidenced by “I’m having trouble breathing”

1.Goal met. O2 is being monitored as well as pulse ox. 2.Goal met. Patient sitting up in recliner for at least 2 hours in the morning. Patient sitting up at a 90 degree angle while in bed. Patient also receiving Xanax BID on time.

Imbalanced energy field r/t fatigue

1.Goal met. Patient completed CXR, determining bilateral PE’s. 2. Goal met. XA inhibitor medications administered on time BID, 15mg.

Objective Data

Client’s chief complaint is ineffective airway clearance. He was found to have dyspnea while at home, which increased his anxiety. Pt is a former smoker, and was also diagnosed with COPD.

Patient Information

Chest XR shows infiltrates in bilateral lungs which determine Pulmonary Embolisms bilaterally.

Nursing Interventions

Administer medications on time. Especially Factor XA inhibitors, and benzos.

Keep patient in high fowler’s position which will help him breathe better.

Check patient every hour to make sure his O2 stat is in range. Make sure he also is not having issues with oxygen coming from the nasal cannula and that he is not experiencing any pressure injuries around the ears or nose due to nasal cannula.



