N311 Care Plan #

Lakeview College of Nursing

Happy Kalavadia

Demographics (5 points)

Date of Admission 10/20/2020	Patient Initials NW	Age 69	Gender Male
Race/Ethnicity White	Occupation Railroad Manager	Marital Status Married	Allergies Heparin
Code Status Full code	Height 6 feet	Weight 196 lb	

Medical History (5 Points)

Past Medical History: Atherosclerosis of Coronary Artery of heart with vulnerable angina pectoris. Chronic Kidney Disease Stage III GFR 30-59 ml/min. DM Type II. Essential Hypertension (Chronic). Squamous cell cancer of the nose.

Past Surgical History: Stent placement.

Family History: Mother- Diabetes Father- Hypertension.

Social History (tobacco/alcohol/drugs): No drugs or alcohol. Heavy smoker for 30 years.

Admission Assessment

Chief Complaint (2 points): Shortness of breath and chest pain.

History of present Illness (10 points): Patient went to ER in OSF on October 19 with uncontrolled shortness of breath and chest pain. The patient was very anxious because he was experiencing the symptom for the first time. He came with his wife to ER. The onset of pain was about 4 hours after he has lunch. The location of pain was both side of his chest . The patient described the duration of pain is constant . The patient stated that the characteristics symptom of the pain is dull but constant pain and his chest pain when he deeply inspired and expires. The associated manifestations are pain in chest when he leans forward. He tried resting in supine position for relief of pain, but it did not help. He tried taking ibuprofen, but it did not help either.

Primary Diagnosis

Primary Diagnosis on Admission (3 points): Bilateral pleural effusion

Secondary Diagnosis (if applicable): Congestive Heart Failure

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

Pleural effusion is an excessive collection of blood within the pleural cavity which will affect the lungs to inflate(Capriotti and Frizzell , 2016). There are several causes for pleural effusion like congestive heart failure , pulmonary infection , neoplasm , pneumonia and pulmonary embolism. The etiology of pleural effusion is an excess fluid in the pleural cavity. The fluid can be exudate or transudate. There is an imbalance of capillary hydrostatic or oncotic pressure and hence the excess fluid cannot drain out. Normally there is about 1 ml of fluid between the visceral and parietal pleura. When hydrostatic pressure in the lung exceeds the oncotic pressure fluid will leak out into the pleural space. The sign and symptom of the disease care are very specific which is bilateral lower chest pain. The pain is not sharp but pleuritic in nature. It means that it pains with every normal inspiration and expiration. An exudate is cloudy and has high protein content while the transudate clear and low in protein content. The clinical presentation of the patient is pleuritic cheat pain , dullness to percuss and decreased tactile fremitus(Capriotti and Frizzell , 2016). Treatment of pleural effusion is suction and drainage of the pleural fluid by needle . The patient had arrived to ER with shortness of breath (Panjwani and Salman , 2019).The diagnostic tests are which were performed by the health care provider are CT chest and ultrasound which reveals bilateral pleural effusion and hence chest tube drainage was ordered by the attending physician. The risk factors for developing pleural effusion history of smoking and environmental exposure. The statistics of pleural effusion is 1.5

million cases per year and the most common cause of pleural effusion is heart failure and

malignancy.

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2016). Pathophysiology: introductory concepts and clinical

perspectives. Philadelphia: F.A. Davis Company.

Panjwani, A., & Salman, R. (2019). An uncommon cause of pleural effusion. Practice

Focused Education for Respiratory Professionals, 15, 84-89. doi:10.1183/20734735.0365-

2018

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	4.10-5.70		4.40	Within Normal Range
Hgb	12.0-18.0		14.2	
Hct	37.0-51.0%		40.6%	
Platelets	140,000-400,000		187,000	
WBC	4.0-11.0		9.60	White cells are elevated due to infection and inflammatory response (Caprotti and Frizzell, 2016)
Neutrophils	1.50-7.70		3.6	

	10^3/uL			
Lymphocytes	**1.00-4.90 10^3/uL**		**4.80**	
Monocytes	**0.00-0.80 10^3/uL**		**0.90**	
Eosinophils	**0.00-0.50 10^3/uL**		**0.20**	
Bands	**N/A**		**N/A**	

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	**136-145**		**134**	<mark>**Within normal range**</mark>
K+	**3.5-5.1**		**4.1**	
Cl-	**98-107**		**100**	
CO2	**21.0-32.0**		**26.0**	
Glucose	**60-99**		**131**	**Glucose high due to chronic DM Type II**
BUN	**7-18**		**18**	
Creatinine	**0.70-1.30**		**1.31**	
Albumin	**3.4-5.0**		**4.2**	
Calcium	**8.5-10.1**		**9.8**	
Mag	**1.6-2.6**		**Unable to obtain**	
Phosphate			**Unable to obtain**	
Bilirubin	**0.1.-1.2**		**0.9**	

Alk Phos	44-147 U/L		113	

Urinalysis <mark>Highlight All Abnormal Labs</mark>**—Explanations must be in complete sentences and contain in-text citations in APA format.**   -   <mark>None taken</mark>   -

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	Light yellow			<mark>No Cultures taken for this patient</mark>
pH	7.35-7.45			
Specific Gravity	1.003-1.030			
Glucose	Positive	101	131	Patient is diabetic since 9 years
Protein	Negative			
Ketones	Negative			
WBC	0-25 /ul			
RBC	0-25/ul			
Leukoesterase	Negative			

Cultures <mark>Highlight All Abnormal Labs</mark>**—Explanations must be in complete sentences and contain in-text citations in APA format.**   -   <mark>None taken</mark>   -

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture	N/A	N/A	N/A	<mark>No cultures taken for this patient</mark>
Blood Culture	N/A	N/A	N/A	
Sputum Culture	N/A	N/A	N/A	
Stool Culture	N/A	N/A	N/A	

Lab Correlations Reference (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

Chest X Ray on 10/21/2020 : When the patient arrived at OSF ER, the attending physician ordered the chest x ray which showed bilateral pleural effusion. There was an opaque area on the lower one third of both lungs which indicates that it is filled with excessive amount of fluid.

CT Chest on 10/21/2020: To further confirm , the attending ordered CT chest because it provides the accurate diagnosis as compared to chest x ray. CT shows bilateral lung opacity with transudate fluid in both lungs.

Echo 2D on 10/21/2020: This test was done on the patient to determine the cause of bilateral pleural effusion. There are several causes of it but in my patient, it was congestive heart failure. Also, my patient was not exposed to other environmental hazards which excluded the diagnosis of malignancy.

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

Medications (5 required)

Brand/ Generic	Aspirin	Lipitor/ Atorvastatin	Plavix / Clopidogrel	Lovenox/ Enoxaparin	Toprol-72/ Metoprolol Succinate
Dose	325mg	40mg	75mg	40mg	100mg
Frequency	Once a day	Twice a day	Once a day	Once a day	Twice a day
Route	Oral	Oral	Oral	Subcutaneous	Oral
Classification	NSAID	HMG-CoA reductase inhibitor	Platelet aggregation inhibitor	Anticoagulant	Beta Blocker

Mechanism of Action	Acetylsalicylic acid (ASA) blocks prostaglandin synthesis. It is non-selective for COX-1 and COX-2 enzymes. Inhibition of COX-1 results in the inhibition of platelet aggregation for about 7-10 days (average platelet lifespan).	Atorvastatin is a selective, competitive inhibitor of HMG-CoA reductase, the rate-limiting enzyme that converts 3-hydroxy-3-methylglutaryl-coenzyme A to mevalonate, a precursor of sterols, including cholesterol. It also reduces LDL production and the number of LDL particles.	Binds to ADP receptors on the surface of activated platelets. This action blocks ADP which deactivates nearby glycoprotein IIb/IIIa receptors and prevents fibrinogen from attaching to receptors. Without firbrinogen, platelets can't aggregate and form thrombi.	Potentiates the action of antithrombin III, a coagulation inhibitor. By binding with antithrombin III, enoxaparin rapidly binds with and inactivates clotting factors (Xa and thrombin). Without thrombin, fibrinogen can't convert to fibrin and clots can't form.	Inhibits stimulation of beta-receptor sites, located mainly in the heart, resulting in decreased cardiac output, excitability, and myocardial oxygen demand
Reason Client Taking	Patient has history of heart failure	Patient has history of Diabetes Mellitus type 2	Patient has history of Heart failure	Patient has a history of unstable angina and heart failure	Unstable Angina previously diagnosed
Contraindications (2)	Blood clotting disorder, Anemia	Liver disease, Pregnant patient	Bleeding disorder, TTP(Thrombotic Thrombocytopenic purpura)	Bleeding disorder, Anemia	Acute bronchospasm Cardiogenic shock
Side Effects/Adverse Reactions (2)	Rash, Abdominal pain	GI upset, Hives	Gi bleeding, Itching or allergies	Bruises, GI bleeding	Bradycardia, Increased intracranial pressure

Medications Reference (APA):

Jones & Bartless Learning. (2020). 2020 Nurse's drug handbook (19th ed.).

Burlington,MA.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**Alert and oriented to time, place, and person** **x3** **No distress** **Well-groomed and appropriately dressed**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y**☒ **N** ☐ **Type: Catheter**	**Pink** **Dry/Normal** **Warm** **Normal turgor 2+** **None** **None** **None** **13**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and neck symmetrical, normal cephalic** **Patient's ears are free of discharge** **Eyes symmetrical, EOM normal** **Nose symmetrical, scaly crust on upper 1/3rd of nose, no deviation of**

	nasal septum **Dentition normal** .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☒ N ☐** **Edema Y ☒ N ☐** **Location of Edema:**	**S3 heard over the anterior chest** **Irregular rhythm** **Normal** **Normal** **R and L Ankle**
RESPIRATORY: **Accessory muscle use: Y☒ N ☐** **Breath Sounds: Location, character**	**Dullness to percussion.** **Muffled anterior lung sounds, whizzing with deep inspiration**

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:
	Cardiac diet/soft diet due to unstable Angina
	
	6'00"
	196 lbs
	Bowel sounds are normoactive in all 4 quadrants
	Today
	No CVA tenderness
	No abnormalities found upon inspection for
	distention, incision, scars, drains, or wounds.

GENITOURINARY: **Color:** **Character:** **Quantity of urine: 45 ml** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☒ N ☐**	**Yellow** **Not cloudy , clear** **Voided 3x**

Type: **Size:**	**Foleys catheter** **Unable to obtain**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N☒** **Fall Risk: Y☒ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ⊠** **Needs assistance with equipment ☐** **Needs support to stand and walk ☐**	**None** **Normal ROM** **None** **Strength in both upper and lower extremities** **Low** **Able to walk and stand without any assistance**
NEUROLOGICAL: **MAEW: Y☒ N☐** **PERLA: Y☒ N☐** **Strength Equal: Y☒ N☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	 **Well oriented** **Cognitive of space, time, and location,** **Articulative speech** **Mature and cognitive** **Alert** **No gross focal neurological deficits**
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):**	**Friends** **Mature** **Catholic** **Married for 39 years, wife visited today for few hours**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
9:00 Am	**78/ minute** **(Radial)**	**130/90** **LA**	**18**	**98.7 oral**	**96 with 2L of** **oxygen .**

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
12:00 Am	**6**	**Bilateral lower one third of chest**	**Severe when doing inspiration and expiration**	**Constant/ pain increase when leans forward, dull pain**	**Medication Morphine**

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
360ml IV normal saline **118 ml – coffee with no cream and sugar**	**240ml (read from the urine bag)**

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

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. **Pain**	**Patient was in chest pain when admitted .Also he had constant type of bilateral chest**	**1.Head up position** **2.Breathe slowly**	**Patient agreed to sleep with head up and tried to breathe slowly. Goals were met and patient was satisfied as the**

	pain		symptoms improved
2. Shortness of breath	Patient had shortness of breath when admitted.	1. Leaning forward 2.Nothing by mouth	Patient agreed to lean forward, and he did not eat anything by mouth. Goals were met.

Other References (APA):

Swearingen, P. L., & Wright, J. D. (2019). All-in-one nursing care planning resource:

medical-surgical, pediatric, maternity, and psychiatric-mental health. St. Louis, MO:

Elsevier.

Concept Map (20 Points):

Subjective Data

Patient complaints of pain of 6 on a scale of 10 on lower bilateral chest . He tells that pain is dull but constant and the pain is intensified when leaning forward.

Nursing Diagnosis/Outcomes

Pain and shortness of breath is the nursing diagnoses.
The outcomes were positive because patient benefited from supine with head up and breathing slowly.

Objective Data

Patient does not like to talk much because of ongoing shortness of breath.

Patient Information

Male patient , 69 years old presents with chest pain and shortness of breath.
Height 6 feet
Weight 196 lb.
Full code.

Nursing Interventions

Promote slow and steady breaths.
Promote supine with head up position.