N311 Care Plan #1

Lakeview College of Nursing

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Demographics (5 points)

Date of Admission **10/10/2020**	**Patient Initials** **EH**	**Age** **60**	**Gender** **Female**
Race/Ethnicity **Caucasian**	**Occupation** **Retired**	**Marital Status** **Single**	**Allergies** **Penicillin** **Statins**
Code Status **Full Code**	**Height** **167.3 cm**	**Weight** **75.1 kg**	

Medical History (5 Points)

Past Medical History: Thyroid disorder, hypertension, MRSA, Hepatitis C, asthma, anxiety, depression, heart attack

Past Surgical History: Excision lesion- lipoma intraoral (OR) 12/12/19, appendectomy, foot, fusion of joint of cervical spine by anterior ap. For deformity of cervical spine, fusion of lumbar spine, hysterectomy, knee, tonsillectomy, ulnar nerve

Family History: Mother: hypertension, Father: no known medical history

Social History (tobacco/alcohol/drugs): Pt reports the use of marijuana about twice a week. Pt reports the use of tobacco use, stating she has been smoking since her teenage years. Pt reports the use of alcohol, drinking about three beers a night and occasional Jack Daniels whiskey.

Admission Assessment

Chief Complaint (2 points): Chest pain

History of present Illness (10 points): Onset: On October 10th, 2020, a 60 year old female, Caucasian, single was admitted to Sarah Bush hospital for chest pain. Location: chest. Duration: Pt states the pain has been on and off for a while but two days ago the pain got so excruciating she had to be admitted. Pt stated “I have a lot of anxiety and smoke so I think it all caught up to me”. Characteristics: Pt is experiencing a no pain at the moment. Pt stated “When I was in pain, it was extreme and very sharp, I felt as if I was being stabbed in the chest". Aggravating: performing any high level of actively or when laying down. Treatment: Advil

Primary Diagnosis

Primary Diagnosis on Admission (3 points):COPD

Secondary Diagnosis (if applicable):

Pathophysiology of the Disease, APA format (20 points): Chronic Obstructive Pulmonary Disease (COPD) is a combination of chronic bronchitis, emphysema, and hyperreactive airway disease (Capriotti,2015). Chronic bronchitis characteristics include hypoxia, hypersecretion of mucus in small and large airways and cyanosis. When mucus is in a large quantity it creates an obstruction to inspiratory airflow that decreases a chance for oxygen to flow (Capriotti,2015). Emphysema characteristics includes overdistention of alveoli with trapped air, which creates an obstruction to the expiratory air flow, high residual volume of carbon dioxide in lungs and loss of elastic recoil in the alveoli (Capriotti,2015). These changes are the main cause of COPD including excessive mucus and fibrosis in the bronchioles, smooth muscle hypertrophy and loss of alveolar elastic recoil. When chronic bronchitis is inflamed it can cause permanent remodeling of the pulmonary structure (Capriotti,2015). In the lungs of a patient with COPD there is proteolytic-antiproteolytic enzyme imbalance, which leads to changes with emphysema. Smoking is the activator of proteolytic enzymes, which release neutrophils and macrophages. It also inactivates the body's natural antioxidants and antiproteolytic(Capriotti,2015). Cigarette smoke contains free radicals that cause damage to the respitory cell membranes and arterial endothelial cells. In poor ventilated areas, hypoxia stimulates pulmonary arterial vasoconstriction

(Capriotti,2015). In severe cases of COPD, carbon dioxide levels increase and become chronic. Due to this the arterial chemoreceptors along with the respiratory center in the middle of the medulla become insensitive to high carbon dioxide levels (Capriotti,2015). Also in severe cases, hypoxia is needed for a patient to stimulate breathing. If a large amount of oxygen is administered it can depress the patient's own ability to breath and result in respiratory arrest. By slowly administering oxygen gives the patient the necessary amount they need (Capriotti,2015).

Some causes of COPD include smoking, your environment and alpha-1 deficiency. Risk factors include exposure to air pollution, breathing in second hand smoke, working with chemicals, dust and fumes, a genetic condition (alpha-1 deficiency) and a history of childhood respiratory infection (What Causes COPD).

Common signs and symptoms of COPD include: chronic bronchitis, emphysema, and asthma. The first symptom is usually dyspnea, which is shortness of breath. As COPD progresses, dyspnea becomes worse with less ability to excrete (Capriotti,2015). When the patient is coughing and wheezing it is a big indication of chronic bronchitis. Production of a lot of mucus can be present. Clubbing in the fingers indicates chronic hypoxia (Capriotti,2015). When examining the thoracic cage, if the chest is barrel shaped it is known to be emphysema. Cyanosis, a blue color will be identified around the patients lips or finger nail beds. (What Causes COPD).

The diagnostic testing for COPD include (CAT) which is a questionnaire that asks specific questions about the patients ability to breath and activity limitations due to pulmonary symptoms. PFT or spirometry to test how well the lungs are able to inhale and

exhale. Complete blood count (CBC), blood chemistry panel, X-ray, electrocardiogram (ECG) and ABGs are used to diagnose COPD (Capriotti,2015).

Treatments for COPD need to be treated different to all patients because everyone has different symptoms. COPD medications can help the patient breath better, do more daily activates and have fewer flaw ups (What Causes COPD). Pulmonary rehabilitation, supplemental oxygen, surgery, clinical trials and complementary therapies can help treat COPD (What Causes COPD).

Pathophysiology References (2) (APA):

Capriotti, Theresa M. and Frizzell, Joan Parker, "Pathophysiology: Introductory Concepts and Clinical Perspectives" (2015). *Faculty Bookshelf*. 75.

What Causes COPD. (n.d.). Retrieved October 15, 2020, from https://www.lung.org/lung-health-diseases/lung-disease-lookup/copd/what-causes-copd

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	3.80-5.41	4.0	3.66	Due to not enough oxygen circulating, which will result in chest pain.
Hgb	11.3-15.2	13.7	12.1	
Hct	33.2-45.3	39.2	36.6	
Platelets	149-393	217	209	

WBC	**4.0-11.7**	**8.8**	**8.8**	
Neutrophils	**45.3-79.0**	**70.2**	**55.3**	
Lymphocytes	**11.8-45.9**	**18.5**	**29.8**	
Monocytes	**4.4-12.0**	**9.8**	**13.4**	**Due to the presence of chronic infection.**
Eosinophils	**0.0-6.3**	**0.5**	**0.9**	
Bands	**0.2-1.6**	**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**
Na-	**136-145**	**130**	**139**	**Due to chest pain- low sodium is due to certain medications**
K+	**3.5-5.1**	**4.1**	**4.4**	
Cl-	**98-107**	**95**	**101**	**Due to low electrolyte intake**
CO2	**21-31**	**20**	**32**	**High levels of CO2 indicate slow oxygen delivery, and low CO2 due to pH imbalance due to the shortness of breath**
Glucose	**74-109**	**87**	**101**	
BUN	**7-25**	**14**	**7**	
Creatinine	**.84-1.21**	**1.20**	**0.85**	
Albumin	**3.5-5.2**	**3.3**	**3.2**	**Low albumin due to the rounding of the abdomen**
Calcium	**8.6-10.3**	**8.1**	**8.5**	**Due to rbc being low, and certain drugs**
Mag	**N/A**	**N/A**	**N/A**	
Phosphate	**N/A**	**N/A**	**N/A**	
Bilirubin	**0.3-1.0**	**3.4**	**1.8**	**High bilirubin is due to problem**

				with rbc, increase of stress (anxiety)
Alk Phos	**35-105**	**202**	**138**	**Due to pt having hepatitis C**

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	**Pale yellow/ clear**	**N/A**	**N/A**	**No urinalysis completed*** **
pH	**5-8**	**N/A**	**N/A**	
Specific Gravity	**1.005-1.030**	**N/A**	**N/A**	
Glucose	**Negative**	**N/A**	**N/A**	
Protein	**Negative**	**N/A**	**N/A**	
Ketones	**Negative**	**N/A**	**N/A**	
WBC	**0-5**	**N/A**	**N/A**	
RBC	**0-6**	**N/A**	**N/A**	
Leukoesterase	**Negative**	**N/A**	**N/A**	

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	**Negative**	**N/A**	**N/A**	**No cultures completed*** **
Blood Culture	**Negative**	**N/A**	**N/A**	
Sputum Culture	**Negative**	**N/A**	**N/A**	

Stool Culture	**Negative**	**N/A**	**N/A**	

Lab Correlations Reference (APA):

Sarah Bush reference information

Diagnostic Imaging

All Other Diagnostic Tests (10 points):

<u>Stress test- NM myocardial SPECT- Rest and Stress: </u>reason: chest pain

-no results available: pt had this test done while I was on the floor.

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

Medications (5 required)

Brand/ Generic	**Protonix/ Pantoprazole**	**Bupropion/ wellbutrin**	**Klonopin/ clonazepam**	**Lexapro/ escitalopram**	**Gabapentin/ Neurontin**
Dose	**40 mg**	**150 mg**	**0.5 mg**	**20 mg**	**600 mg**
Frequency	**1x daily**	**1x day**	**1x (BID)**	**2x daily**	**2x (TID)**
Route	**oral**	**oral**	**PO**	**PO**	**PO**
Classification	**Proton pump inhibitor**	**Aminoketone, antidepressant**	**Benzodiazepine, anticonvulsant**	**Selective serotonin, antidepressant**	**1-amino-methyl cyclohexaneacdtic**
Mechanism of Action	**Interferes with gastric acid secretion by inhibiting the hydrogen-potassium-adenosine triphosphate enzyme**	**May inhibit dopamine, norepinephrine, and serotonin uptake by neurons, which significantly relieves**	**Although unknown, drug is thought to prevent panic and seizures by potentiating the effects of gamma-**	**Inhibits reuptake of the neurotransmitter serotonin by CNS neurons, thereby increasing**	**Structurally like gamma-aminobutyric acid, the main inhibitory neurotransmitter in the brain.**

	system, or proton pump uses energy from hydrolysis of ATPase. Inhibits final step in gastric acid production by blocking the exchange of H+ and extra cellular K+.	**evidence of depression.**	**aminobutyric acid**	**the amount of serotonin available in nerve synapses.**	
Reason Client Taking	**Reduce tightness in chest**	**Depression**	**anxiety**	**To treat anxiety disorder**	**To treat neuropathic pain**
Contraindications (2)	**Concurrent therapy with rilpivirine containing products, hypersensitivity to pantoprazole**	**Hypersensitivity to bupropion or its components, seizure disorder or conditions that increase risk of seizures**	**Acute-narrowing-angle glaucoma, hepatic disease**	**Concomitant therapy with pimozide, hypersensitivity to escitalopram**	**Hypersensitivity to gabapentin or its compnents**
Side Effects/Adverse Reactions (2)	**Anxiety, abdominal pain**	**Abnormal coordination, hypotension**	**Aggression, insomnia**	**Dizziness, constipation**	**Hypotonia, dystonia**

Medications Reference (APA):

Institute for Safe Medication Practices: ISMP Medication Safety Alert. (2020). *2020 Nurse's Drug Handbook.* (Nineteenth ed.). Burlington, MA: Jones & Bartlett learning.

Assessment

Physical Exam (18 points)

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	 **Alert and oriented to time, place, and person** **X4** **No distress** **Well-groomed and appropriately dress**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☒** **Type: N/A**	 **Pink** **Dry/normal** **Warm** **Normal turgor 2+** **No rashes present** **Bruise on top of right hand** **No wounds present** **21**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head and neck symmetrical, normal display of head, neck and lymph nodes.** **Ears are pink and free of discharge** **Nose is symmetrical**
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:**	**Heart sounds for S1 and S2 are normal, no murmurs, no gallops, no bruits or rubs detected in S3 and S4. Peripheral pulse 2+ symmetrical. Capillary refill normal for ethnicity/ less than or equal to 3 seconds. No neck vein distention, no edema.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character**	**Respirations are regular and unlabored. Anterior and posterior diagnosed wheezing sounds. Lung alteration is equal, able to secrete, hacking up mucus. All lobes are diminished in upper airway-wheeze.**

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: N/A** **Feeding tubes/PEG tube Y ☐ N ☒** **Type: N/A**	 **Normal diet at home** **Heart healthy diet at the hospital** **167.6 cm** **75.1 kg** **Bowl sounds are active** **Last BM was October 10th** **Palpations of abdomen shown to be soft, non-tender, abdomen descripted as rounded** **No abnormalities found: distention, incisions, scars, drains, wounds.**
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:**	**Pt did not urinate during my time on the floor due to being brought to receive a stress test**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 35** **Activity/Mobility Status: Normal** **Independent (up ad lib) X☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	 **Normal ROM** **Pt does not use an assistive devices** **Pt shows strength in upper and lower extremities.**
NEUROLOGICAL: **MAEW: Y ☐ N☒** **PERLA: Y ☐ N☒**	

Strength Equal: Y ☒ N ☐ if no - Legs ☐ Arms ☐ Both ☐ **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**Cognitive of space, time and location (oriented to own ability)** **Normal/ clear** **Alert** **No neurological deficiencies**
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):**	**Copping independently, has an anxiety dog** **Mature** **No religious preferences** **Pt has a an anxiety dog to help cope with her anxiety**

Vital Signs, 1 set (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
7:57 am	71	156/78	18	36.4	98%

Pain Assessment, 1 set (5 points)

Time	Scale	Location	Severity	Characteristics	Interventions
8 am	1	chest	1	Dull pain	The use of medications to decrease the pain.

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
Food: egg and cheese omelet- 80% of breakfast	Pt did not void while I was on the floor. BM: 0x- pt has not had a BM since October 10th

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, chronic	**Related to chest pain, as evidence by "I have slight pain in my chest"**	**1. Administer pain medication around the clock** **2.Administer a cough medicine to release any mucus or blockage for breathing**	**Pt responded to the pain medications and resulted from pain being 1/10 to a 0/10**
2. Anxiety signs and symptoms reduced	**Related to chest pain, as evidence by "I'm so anxious, my anxiety is rough"**	**1. Administer antidepressants and anxiety medication around the clock** **2. Breathing exercises to reduce the anxiety**	**Pt responded better to the antianxiety medication but still showed evidence of being anxious. Goal was partially met.**

Other References (APA):

Concept Map (20 Points):

Subjective Data

Pt states "I have chest pain, and lots of anxiety"

Nursing Diagnosis/Outcomes

Pain, chronic: Related to chest pain, as evidence by "I have slight pain in my chest", 1. Administer pain medication around the clock 2.Administer a cough medicine to release any mucus or blockage for breathing, Pt responded to the pain medications and resulted from pain being 1/10 to a 0/10.

Anxiety signs and symptoms reduced: Related to chest pain, as evidence by "I'm so anxious, my anxiety is rough", Administer antidepressants and anxiety medication around the clock, Breathing exercises to reduce the anxiety, Pt responded better to the antianxiety medication but still showed evidence of being anxious. Goal was partially met.

Objective Data

Pt chief complaint was chest pain and shortness of breath.
Vital Signs:
Temperature: 36.4
B/P: 156/78
Pulse: 71
Respitory Rate: 18
Oxygen: 98%

Patient Information

Pt has been diagnosed with adult asthma in the past. Pt has chest pain and shortness of breath symptoms.

Nursing Interventions

1. **Administer pain medication around the clock.**
2. **Administer cough medicine to release any mucus or blockage for breathing.**
3. **Administer antidepressants and antianxiety around the clock.**
4. **Conduct breathing exercises to reduce anxiety.**