N441 Care Plan

Lakeview College of Nursing

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Demographics (3 points)

Date of Admission	**Client Initials**	**Age**	**Gender**
1/22/22	DT	60	Female
Race/Ethnicity	**Occupation**	**Marital Status**	**Allergies**
Caucasian	Disabled	Single	Adhesive bandage
Code Status	**Height**	**Weight**	
Full code	139.7 cm / 55 inches	31.6 kg / 69.7 lbs	

Medical History (5 Points)

Past Medical History: Arthritis, asthma, coronary artery disease, COPD, high cholesterol, hypertension, diverticulitis

Past Surgical History: Hysterectomy, foot pins, colectomy, colostomy, cesarean section, jaw surgery, colonoscopy, shoulder arthroscopy, cardiac catheterization

Family History:

Father: cardiovascular disease, diabetes mellitus, hypertension, skin cancer, stroke

Mother: cardiovascular disease

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use):

Tobacco: Smokes a ¼ pack per day

Alcohol: Formerly drank every day. Quit drinking 10 years ago.

Drugs: Uses marijuana as needed. Usually, a couple times a week.

Assistive Devices: Patient uses a walker.

Living Situation: Lives at home with her son Tim

Education Level: high school diploma

Admission Assessment

Chief Complaint (2 points): Shortness of Breath

History of Present Illness – OLD CARTS (10 points):

The patient presented to the emergency room on 1/22/2022 with shortness of breath that had been going on for two days. Patient stated that she struggles with this a lot. Along with being short of breath, the patient complained of mild chest pain, rated at a 3 out of 10 on the number scale. She also noted that she was having congestion that worsened at night. The patient uses a BiPap at night however, her congestion made it difficult to use. The patient also tried using an inhaler however her symptoms did not improve. During the day she is chronically on 3L of O2 from end stage COPD. Patient states that both oxygen and Bipap were not helping to improve her symptoms.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COPD exacerbation

Secondary Diagnosis (if applicable):

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

Pathophysiology

An individual typically becomes symptomatic with Chronic Obstructive Pulmonary Disorder (COPD) during their middle-age years. The main characteristic of COPD is a limitation of airflow caused by chronic bronchitis, emphysema, or hyperreactive airway disease (Capriotti & Frizzell, 2020). The disease is chronic and progressive in its course. Narrowing, excessive mucus and fibrosis in the bronchioles, loss of alveolar elastic recoil, and smooth muscle

hypertrophy lead to airflow limitations in patients with COPD (Capriotti & Frizzell, 2020). COPD patients suffer from chronic bronchitis, which causes the pulmonary structure to transform and become permanently inflamed (Capriotti & Frizzell, 2020). Inflammation signals the body's defense systems, and specific inflammatory mediators such as leukotrienes, interleukins, and tumor necrosis factors end up damaging lung structures (Capriotti & Frizzell, 2020). Patients with severe COPD develop poor ventilation that causes hypoxia (Capriotti & Frizzell). Severe COPD also causes a chronic increase of CO2, leading to a lack of response to the high CO2 levels (Capriotti & Frizzell, 2020). Hypoxia becomes the stimulus rather than responding to high CO2 levels to stimulate breathing (Capriotti & Frizzell, 2020). This patient has end-stage COPD with chronically elevated CO2 levels leading to shortness of breath from the body using hypoxia to stimulate her breathing.

Signs and Symptoms

COPD presents with typical signs and symptoms of chronic bronchitis, emphysema, and asthma (Capriotti & Frizzell, 2020). One of the first symptoms is dyspnea, or difficulty breathing (Capriotti & Frizzell, 2020). Progression of the disease results in worsened dyspnea with physical activity and exertion (Capriotti & Frizzell, 2020). Cough, wheezing, and difficulty breathing are generally the biggest complaints of patients with COPD (Capriotti & Frizzell, 2020). If the cough is productive, it is essential to gather some for a culture (Capriotti & Frizzell, 2020). Unfortunately, this patient's sputum was never collected or a culture performed. Patients with long-term COPD display typical signs and symptoms of right-sided heart failure. These include jugular venous distention, ascites, hepatosplenomegaly, and ankle edema (Capriotti & Frizell, 2020). This patient's EKG showed right atrial enlargement caused by high arterial pressure due to hypoxia (Capriotti & Frizzell, 2020).

A barrel-shaped chest with increased front and back diameter may be present (Capriotti & Frizzell, 2020). Patients who experience chronic hypoxia present with clubbing of fingers (Capriotti & Frizzell, 2020). Respiratory rate, rhythm, and depth are most affected by COPD (Capriotti & Frizzell, 2020). It is typical to have prolonged exhalation and pursed-lip breathing (Capriotti & Frizzell, 2020). During the examination of this patient, the nurse heard wheezing over the lung fields, which is an expected finding of somebody with COPD.

Expected Findings and Diagnosis

To diagnose COPD, the patient must undergo many different tests. A pulmonary function test is a crucial part of the diagnosis. A less than 70% airflow ratio indicates COPD (Capriotti & Frizzell, 2020). CBC, blood chemistry panel, chest x-ray, electrocardiogram, and arterial blood gases make up the diagnostic tests a patient with go through (Capriotti & Frizzell, 2020). In most cases, patients with mild COPD display normal labs. On a chest x-ray, severe COPD shows low diaphragm borders and hyperinflated lung fields (Capriotti & Frizzell, 2020). This patient's chest x-ray shows expanded lung fields. Expanded lung fields are an expected finding from her COPD. An electrocardiogram typically shows right axis deviation from ventricular hypertrophy (Capriotti & Frizzell, 2020). An enlarged heart is also typical on an ECG of a patient with COPD (Capriotti & Frizzell, 2019).

There are four grades in which COPD is classified (Hinkle & Cheever, 2018). Grade I is mild in severity. Pulmonary function tests show greater than or equal eighty percent (Hinkle & Cheever, 2018). Grade II is moderate in severity. Pulmonary function tests show fifty to eighty percent (Hinkle & Cheever, 2018). Grade III is considered severe COPD. A pulmonary function test results in thirty to fifty percent (Hinkle & Cheever, 2018). An individual with Grade IV

COPD is severely ill. Grade IV pulmonary function results are less than thirty percent (Hinkle & Cheever, 2018).

Treatment

The first step of treatment for COPD is bronchodilators. Mild COPD indicates short-acting bronchodilators and long-acting ones for patients with severe COPD (Capriotti & Frizzell, 2020). The most common form of treatment for COPD is inhalers. Inhaled bronchodilators help alleviate respiratory symptoms. Monotherapy combined with a bronchodilator is the first line of treatment (Capriotti & Frizzell, 2020). Inhaled corticosteroids help if bronchodilators do not alleviate symptoms (Capriotti & Frizzell, 2020). Treatment for acute exacerbations includes oral corticosteroids and phosphodiesterase inhibitors (Capriotti & Frizzell, 2020).

Nonpharmacological treatments include smoking cessation, pneumonia and flu vaccines, and pulmonary rehabilitation. Pulmonary rehabilitation requires the patient to use aerobic exercises and endurance training (Capriotti & Frizzell, 2020). Pulmonary rehabilitation proves most effective for patients who score less than a 50% on their pulmonary function test (Capriotti & Frizzell, 2020). An oxygen saturation lower than 88% requires oxygen therapy. A patient may even require mechanical ventilation if experiencing severe respiratory distress (Capriotti & Frizzell, 2020). If all other nonpharmacological therapies do not help, lung volume reduction surgery removes damaged parts of the lung (Capriotti & Frizzell, 2020).

Individuals with COPD experience exacerbations. An exacerbation is an event that comprises acute changes different from the patient's baseline with the disease (Hinkle & Cheever, 2018). Exacerbations typically bring about a new medication for the patient. Knowing the cause of the exacerbation prevents future flareups from happening. Hospitalization for exacerbations includes severe dyspnea, confusion, lethargy, respiratory muscle fatigue,

paradoxical chest wall movement, peripheral edema, worsening or new onset of central cyanosis, persistent hypoxemia, and the possibility of mechanical ventilation (Hinkle & Cheever, 2018).

Pathophysiology References (2) (APA):

Capriotti, T., & Frizzell, J. P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* F.A. Davis Company

Hinkle, J. L. & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

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	Reason for Abnormal Value
RBC	3.9 – 5.0	4.30	3.56	A decreased red blood cell count is attributed to many things including chronic illness, dietary insufficiency, and anemia (Capriotti & Frizzell, 2020). This patient suffers from COPD, which is a chronic disease. She is also under weight, which could be a cause for dietary insufficiency.
Hgb	12.0 – 15.5	12.5	10.2	Anemia, nutritional deficiency, and kidney disease result in low hemoglobin levels (Capriotti & Frizzell 2020).
Hct	35 – 45%	38.7%	31.7%	Anemia and nutritional deficiency are reasons for low hematocrit levels (Capriotti & Frizzell, 2020). This patient is likely experiencing anemia and nutritional deficiency from being underweight.
Platelets	150,000 –	401,0000	296,000	Normal lab value

	500,000			
WBC	4,500 – 11,000	13,600	16, 400	Increased WBC count indicates an infection within the body (Capriotti & Frizzell, 2020).
Neutrophils	45.3 – 79%	68.3%	93.4 %	Elevated neutrophils are associated with inflammation and infection. This is due to the patient's exacerbation of COPD and the inflammation of the bronchioles (Capriotti & Frizzell, 2020).
Lymphocytes	11.8 – 45.9%	21.6%	3.5%	Decreased lymphocyte counts are a result of infection or illness (Capriotti & Frizzell, 2020). The patient was diagnosed with COPD exacerbation with is the reason for the lymphocyte levels.
Monocytes	4.4 – 12.0%	8.1%	4.9%	Normal lab value
Eosinophils	0.0 – 6.3%	NA	NA	NA
Bands	0.0 – 5.0%	NA	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-	135 – 145	139	140	Normal lab value
K+	3.5 – 5.0	4.4	4.2	Normal lab value
Cl-	98 – 108	96	96	Hypochloremia can be a result of taking corticosteroids and respiratory problems (Capriotti & Frizzell, 2020)
CO2	22 -29	37	41	Increased CO2 levels are a result of not enough oxygen levels entering the lungs and not enough CO2 leaving the lungs (Capriotti & Frizzell, 2020). The patient is diagnosed with COPD which prevents her from getting enough oxygen into her lungs.
Glucose	74 – 109	79	104	Normal lab value

BUN	8 – 25	9	11	Normal lab value
Creatinine	0.6 – 1.2	0.39	0.42	Low creatinine levels are due to debilitation and decreased muscle mass (Capriotti & Frizzell, 2020).
Albumin	3.5 – 5.0	NA	NA	NA
Calcium	8.6 – 10.4	NA	8.8	Normal lab value
Mag	1.6 – 2.4	NA	NA	NA
Phosphate	2.5 – 4.5	NA	NA	NA
Bilirubin	0.0 – 1.2	0.3	NA	Normal lab value
Alk Phos	35 – 105	74	NA	Normal lab value
AST	0 – 35	17	NA	Normal lab value
ALT	24 – 36	NA	NA	NA
Amylase	30 – 110	NA	NA	NA
Lipase	12 – 70	NA	NA	NA
Lactic Acid	0.5 – 2.2	NA	NA	NA
Troponin	0 – 0.4	<0.010	NA	Normal lab value
CK-MB	0.6 – 6.3	NA	NA	NA
Total CK	30 – 223	NA	NA	NA

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	0.86 – 1.14	NA	NA	NA

PT	11.9 – 15	NA	NA	NA
PTT	25 – 40	NA	NA	NA
D-Dimer	<500	NA	NA	NA
BNP	0 – 99	NA	NA	NA
HDL	40 – 80	NA	NA	NA
LDL	65 – 125	NA	NA	NA
Cholesterol	<170	NA	NA	NA
Triglycerides	50 – 150	NA	NA	NA
Hgb A1c	<6%	5.7%	NA	Normal lab value
TSH	0.5 – 5	NA	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	Yellow/clear	NA	NA	NA
pH	5.0 – 8.0	NA	NA	NA
Specific Gravity	1.005 – 1.034	NA	NA	NA
Glucose	Normal	NA	NA	NA
Protein	Negative	NA	NA	NA
Ketones	Negative	NA	NA	NA
WBC	<5	NA	NA	NA
RBC	0 – 4	NA	NA	NA
Leukoesterase	Negative	NA	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	7.2	7.32	Low pH levels are expected for patients having trouble breathing with COPD (Capriotti & Frizzell, 2020)
PaO2	80 – 100	30.1	81.6	The patient presented with shortness of breath. Her low PaO2 is because her body is not receiving enough oxygen due to her COPD exacerbation (Capriotti & Frizzell, 2020).
PaCO2	35 – 105	101	73.6	Normal lab value
HCO3	22 – 26	30.4	32.8	Her elevated bicarb levels are due to her inability to get rid of carbon dioxide as a result of her shortness of breath (Capriotti & Frizzell, 2020)
SaO2	95 – 100	50.3	96.4	Her low SaO2 levels are in relation to having difficulties breathing and not providing enough oxygen to the blood cells (Capriotti & Frizzell, 2020). After arriving to the hospital, she was provided with nebulizer treatments which helped to bring her oxygen saturation back to normal.

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	NA	NA	NA
Blood Culture	Negative	NA	NA	NA
Sputum Culture	Negative	NA	NA	NA
Stool Culture	Negative	NA	NA	NA

Lab Correlations Reference (1) (APA):

Capriotti, T., & Frizzell, J. P. (2020). *Pathophysiology: Introductory concepts and clinical perspectives.* F.A. Davis Company.

Sarah Bush Lincoln. (2020). Laboratory values. *Cerner PowerChart.* Cerner

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

1. Electrocardiogram: Results show an abnormal EKG with sinus tachycardia, right atrial enlargement, and nonspecific ST abnormality.
2. Chest X-ray: Results were negative. No acute process noted. Heart size was normal. Lungs hyperexpanded but clear with no visualized pneumothorax or pleural effusion. Osseous structures intact.

Diagnostic Test Correlation (5 points):

1. This test was ordered due to the patients tachycardic rhythm upon arrival to the emergency room. An electrocardiogram (EKG) graphs the hearts and its different cycles (Hinkle & Cheever, 2018). An EKG helps to diagnose different heart conditions which present through arrhythmias, wave patterns, increased or decreased interval durations, and heart rate (Hinkle & Cheever, 2018).
2. Chest X-ray: The chest x-ray was performed because the patient was short of breath. A chest x-ray provides the healthcare team with a better picture of the lungs and structures within the chest to help better diagnose what the patient is experiencing (Hinkle & Cheever, 2018).

Diagnostic Test Reference (1) (APA)

Hinkle, J. L. & Cheever, K. H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing* (14th ed.). Wolters Kluwer Health Lippincott Williams & Wilkins

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

Home Medications (5 required)

Brand/ Generic	Norvasc/ amlodipine besylate	Coreg/ carvedilol	Neurontin/ gabapentin	Protonix/ pantoprazole sodium	Ditropan/ oxybutynin chloride
Dose	5 mg	6.25	300 mg	40 mg	5 mg
Frequency	Daily	BID	Daily	Daily	Daily
Route	Oral	Oral	Oral	Oral	Oral
Classification	Chemical: dihydropyramide Therapeutic: antianginal, antihypertensives	Chemical: nonselective beta blocker with alpha adrenergic blocking activity Therapeutic: Antihypertensive, heart failure treatment adjunct	Chemical: Cyclohexane acetic acid derivative Therapeutic: Anticonvulsant	Chemical: PPI Therapeutic: Antiulcer drug	Chemical: tertiary amine Therapeutic: Antispasmodic

Mechanism of Action	Prevents the influx of calcium ions across slow calcium channels. This decreases calcium level within the cell and relaxes cardiac muscles which leads to lower systolic and diastolic blood pressures.	Reduces cardiac output through vasodilation and lowering peripheral vascular resistance. Reduces blood pressure and cardiac workload.	Prevents exaggerated responses to painful stimuli and pain related responses to help with restless leg syndrome.	Inhibits proton pump activity by binding to hydrogen potassium adenosine triphosphatase which helps to suppress gastric acid secretion.	Decreases detrusor muscle contractions within the bladder to increase bladder capacity and the urge to void.
Reason Client Taking	Hypertension	Hypertension	Restless leg syndrome	GERD	Urinary incontinence and urgency
Contraindications (2)	Aliskiren therapy in patients with diabetes or renal impairments GRF less than 60 ml/ min	Asthma or related bronchospastic conditions Second- or third-degree AV block	Hypersensitivity reactions Administration of live or attenuated live vaccines	Individuals with osteoporosis Hypersensitivity reactions to pantoprazole or its components	GI obstruction Acute hemorrhage
Side Effects/Adverse Reactions (2)	Dyspnea Dizziness	Increased cough Fatigue	Cough Blood glucose fluctuation	Abdominal pain Bronchitis	Bronchitis Hypertension
Nursing Considerations (2)	Administer amlodipine with food to help	Monitor patients blood glucose	Administer the first dose at bedtime to minimize any	Administer oral medication 30 minutes before	Use cautiously in patients with diarrhea

	relieve GI upset. Monitor patients with impaired liver function because the drug is metabolized in the liver.	levels because the drug may affect blood glucose levels. Beta blocker therapy is not typically withheld before surgery because its benefits outweigh the risks.	adverse reactions. Give drug at least 2 hours after antacid.	a meal. Pantoprazole should not be given longer than necessary.	because it's a sign of an incomplete GI obstruction. Notify provider for a lower dose if the patient displays agitation, confusion, hallucinations, or somnolence within the first few months of therapy.
Key Nursing Assessment(s) /Lab(s) Prior to Administration	Monitor blood pressure while adjusting dosage. Assess patient frequently for chest pain when sitting or after increasing the dosage.	Monitor blood pressure and pulse before medication administration. Watch the patient for weight gain or increased shortness of breath.	Monitor renal function. Monitor patient closely for suicidal thinking or behavior, especially at the beginning of therapy or after dosage changes.	Expect to monitor PT or INR during therapy if patient takes an oral anticoagulant. Monitor magnesium levels because prolonged use can cause decreased levels. Signs and symptoms of low magnesium levels include abnormal heart rate, palpitations, muscle spasms,	Assess urinary symptoms before and after drug therapy. Watch for adverse cardiovascular reactions in patients with arrhythmias, coronary artery disease, heart failure or hypertension because the drug increases their risk.

				tremors, or seizures.	
Client Teaching needs (2)	Take a missed dose as soon as remembered and follow the next does after 24 hours. Have blood pressure checked routinely for hypotension.	Drug may cause dizziness, light headedness, and orthostatic hypotension. Seek emergency care immediately if hives or facial swelling occurs.	Do not stop drug abruptly. Schedule and keep follow up appointments with provider to monitor progress.	Swallow tablets whole and do not chew or crush them. Relief of symptoms should start within 2 weeks of starting the medication.	Take the medication on an empty stomach. Avoid using alcohol when taking the medication.

Hospital Medications (5 required)

Brand/ Generic	Aspirin/ acetylsalicylic acid	Lovenox/ enoxaparin sodium	Levaquin/ levofloxacin	Solumedrol/ methylprednisolone sodium succinate	Crestor/ rosuvastatin
Dose	81 mg	40 mg	750 mg	40 mg	40 mg
Frequency	Daily	Daily	Daily	Q8h	Daily
Route	PO	SQ injectable	IV piggyback	IV push	Oral
Classification	Chemical: salicylate Therapeutic: anti-inflammatory, antiplatelet, antipyretic, nonopioid analgesic	Chemical: low molecular weight heparin Therapeutic: Antithrombotic	Chemical: Fluoroquinolone Therapeutic: Antibiotic	Chemical: synthetic glucocorticoid Therapeutic: Anti-inflammatory, immunosuppressant.	Chemical: HMG-CoA reductase inhibitor Therapeutic: antihyperlipidemic
Mechanism	Blocks	Potentiates	Interferes	Suppresses	Reduces

of Action	cyclooxygenase which takes part in mediating inflammatory response by causing vasodilation, swelling, and pain. It also inhibits platelet aggregation by preventing the production of thromboxane.	the action of antithrombin III, a coagulation inhibitor.	with bacterial cell replication by preventing gyrase. Gyrase is responsible for repair and replication of bacterial DNA	inflammatory and immune responses by preventing the accumulation of monocytes and neutrophils at sites of inflammation.	lipid levels by increasing the number of LDL receptors on the cell surface that focus on the catabolism of LDL.
Reason Client Taking	To prevent or reduce severity of ischemic attacks, strokes, or heart attacks	To prevent clot formation	COPD exacerbation	COPD exacerbation	Coronary artery disease
Contraindications (2)	Allergy to tartrazine dye Bleeding problems such as hemophilia	Active bleeding. History of Heparin induced thrombocytopenia	Hypersensitivity reactions Myasthenia gravis	Fungal infection Hypersensitivity reactions	Active liver disease Elevation of transaminase levels
Side Effects/ Adverse Reactions (2)	Bronchospasm Decreased blood iron level	Pulmonary edema Hemorrhage	Anxiety hyperglycemia	Pulmonary edema Impaired wound healing	Interstitial lung disease Bronchitis
Nursing Considerati	Do not crush time release	Do not give medication	Avoid giving drug within	Arrange for a low sodium diet with	Notify provider

ons (2)	or control release tablets unless directed. Use immediate release aspirin in situations where a rapid onset of action is required such as in the treatment of MI or before percutaneous coronary intervention.	through IM injection. Keep protamine sulfate nearby in case of an overdose.	two hours of an antacid. If diarrhea develops, obtain a stool sample to test for C. diff.	added potassium. Discard any IV form that is discolored or contains particles.	about proteinuria or hematuria. Use cautiously in patients who consume large quantities of alcohol.
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor patients bleeding times.	Test stool for occult blood. Check serum potassium levels for elevation.	Monitor kidney function. Obtain culture and sensitivity tests before treatment. Monitor patients' glucose levels during drug therapy.	Closely monitor for signs of infection because drug may mask them. Assess for possible depression or psychotic episodes. Monitor blood glucose levels Monitor patients' liver enzymes.	Monitor serum lipoprotein levels Obtain baseline liver enzymes and monitor throughout drug therapy
Client Teaching needs (2)	Take aspirin with food or after meals to prevent stomach upset. Stop taking aspirin and	Teach patient how to give medication at home and the best way to administer subcutaneo	Increase fluid intake to prevent crystalluria. Avoid excessive sun exposure due to	Avoid individuals with contagious disease. Continue regular exercise and physical activity to help maintain muscle mass.	Encourage the patient to follow a low fat, low cholesterol diet. Notify

	contact provider if symptoms of gastrointestinal bleeding occur such as passing bloody or tarry stool.	us injections. Review the safe handling and disposal of needles	photosensitivity while taking the medication.		provider immediately for muscle pain, tenderness, or weakness accompanied by a fever.

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2019). *Nurses drug handbook*

Assessment

Physical Exam (18 points) – HIGHLIGHT ALL PERTINENT ABNORMAL FINDINGS

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient was A&O x 4. She was oriented to self, location, time, and situation. During the assessment, the patient appeared to be well groomed. She was able to respond to all questions asked and did not seem to be in any distress.
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score: 19** **Drains present: Y☐ N ☒** **Type:**	Braden Score: 19 The patient's skin was normal for her ethnicity. Upon palpation it was warm, dry, and intact with elastic turgor. No rashes or bruises present. She had red areas bilaterally on her heels. Her coccyx also had an area of red skin breakdown. There were no drains present. She has a Braden score of 19 which places her at no risk for pressure ulcers.
HEENT: **Head/Neck:** **Ears:**	The patient's head was normocephalic. Trachea and uvula were midline. Oral mucosa was pink, moist, and intact. There was no tonsil exudate

Eyes: **Nose:** **Teeth:**	noted. Tympanic membranes were pearly grey, intact, and without drainage bilaterally. Pupils were equal, round, reactive to light, and accommodate. Septum was midline with no notice of epistaxis. All teeth were intact with no abnormalities noted.
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:**	S1 and S2 were auscultated. The patient runs between sinus regular and sinus tachycardia rhythm. Radial and pedal pulses were noted at 3+ bilaterally. Capillary refill was less than 3 seconds bilaterally in the upper extremities. No jugular vein distention noted. The patient did not have any edema.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** **Placement (cm to lip):** **Respiration rate:** **FiO2:** **Total volume (TV):** **PEEP:** **VAP prevention measures:** VAP prevention measures include oral care, suctioning, and patient positioning every 2 hours or more if needed.	Accessory muscle use was not noted. Upon auscultation, expiratory wheeze was heard anterior and posterior, in all lobes bilaterally. The patient is chronically on oxygen at 3L nasal canula. At night she uses a Bipap. The patient did not have an ET tube in place. While being assessed the patient was observed having a nonproductive cough.
GASTROINTESTINAL: **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 regular diet at home and in the hospital. She is 139.7 cm and 31.6 kg. Bowel sounds were active in all 4 quadrants. Her last bowel movement was on 1/24/2022. Upon palpation, her abdomen was soft with no distention, masses, or pain. There were no incisions or drains present. The patient had an ostomy that was reversed in 2018. There is a scar on her abdomen from where the ostomy used to be. There is no NG or feeding tubes present. No discomfort was noted during assessment

Wounds: **Ostomy: Y ☐ N ☒** **Nasogastric: Y ☐ N ☒** **Size:** **Feeding tubes/PEG tube Y ☐ N ☒** **Type:**	
GENITOURINARY: **Color:** **Character:** **Quantity of urine:** **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☒** **Type:** **Size:** **CAUTI prevention measures:** CAUTI prevention includes handwashing, maintaining a sterile field when inserting the catheter, and proper peri and catheter care. Catheters should only be used if necessary.	The patient's urine was yellow and clear. She had 300 ml of output. Patient denies any pain with urination. There was no bladder distention noted. Genitals were normal for ethnicity. Patient was not on dialysis and did not have a catheter.
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☒ N ☐** **Fall Risk: Y ☒ N☐** **Fall Score: 45** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☒** **Needs support to stand and walk☒**	**Fall score: 45** Patient was alert and oriented to self, location, time, and situation. She was able to perform full range of motion with her upper and lower extremities bilaterally. Strength in the upper extremities is 5/5 bilaterally. Strength in the lower extremities is 3/5 bilaterally. Patient needs assistance to complete activities of daily living. She is considered a moderate fall risk because she has multiple diagnoses and is receiving IV therapy. She also uses a walker to ambulate. Patient requires a 1 person assist with ambulation and needs assistance with equipment. At home she uses a walker to ambulate.
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☒ N ☐ if no -** **Legs ☐ Arms ☐ Both ☒** **Orientation:** **Mental Status:** **Speech:** **Sensory:**	The patient was able to move all extremities well. Her pupils were equal, round, reactive to light, and accommodate. She displayed 5/5 strength bilaterally in her upper extremities and 3/5 strength bilaterally in her lower extremities. The patient responded to all question with clear speech and no deficits in cognition or memory. Her sensorium is intact. She was A&O x4.

LOC:	
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):**	The patient relies on her son Tim as her support system. He is very helpful and cares for her when she needs it. Her developmental level is appropriate for her age. She is not a religious person. She enjoys watching tv and spending time with her son to help her cope with her illness.

Vital Signs, 2 sets (5 points) – HIGHLIGHT ALL ABNORMAL VITAL SIGNS

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0804	96	132/64	18	36.2	99% on 3L NC
1122	91	120/57	18	36.1	98% on 3L NC

Vital Sign Trends/Correlation:

Overall, the patient's vital signs remained stable throughout clinical. The first set of vitals resulted in an elevated blood pressure. The patient is on two different daily blood pressure medications for hypertension. The first set of vitals was take just before administering her medications. By the second set of vitals, her medication was able to take effect and it resulted in a normal reading.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0750	Number	Chest	4/10	Dull	Pain medication
1115	Number	Chest	2/10	Dull	Breathing treatments, rest

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.:** **IV dressing assessment:**	20-gauge IV in the left forearm dated 1/25/2022. The patient was hooked up to levofloxacin 750 mg over 60 minutes. The IV is patent and flushes with no signs of erythema or drainage noted. The dressing is clean, dry, and intact.
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	The patient did not have any other lines.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
200 mL juice 100 mL IV	300 mL urine

Nursing Care

Summary of Care (2 points)

Overview of care: Overview of care: After report, the patient's vitals were taken, and her head-to-toe assessment was performed. She was given her morning medications and ate her breakfast. Respiratory visited the patient in the morning to administer her breathing treatments. After the assessment, the patient waited on the cardiologist to make

his rounds. The cardiologist approved her for discharge and all the was left was approval from the pulmonologist. Physical therapy visited the patient before lunch.

Procedures/testing done: Phlebotomy visited the patient to draw blood for her daily labs. An x-ray was also performed to get a look at the patient's chest.

Complaints/Issues: The patient had no complaints or issues throughout clinical.

Vital signs (stable/unstable): Overall her vitals were stable. During the first set of vitals her blood pressure was elevated, however that resolved after being provided with her daily blood pressure medications.

Tolerating diet, activity, etc.: The patient has a good appetite. She ate all of her breakfast. She ambulates with the assistance of one person. She tolerates ambulation well. Physical therapy worked with the patient

Physician notifications: The pulmonologist was notified to inform him that cardiology cleared the patient and all that was left was his okay for discharge.

Future plans for client: The client expects to be discharged later today or tomorrow morning.

Discharge Planning (2 points)

Discharge location: The client is planning to discharge home where her son will help take care of her.

Home health needs (if applicable): The patient requires home oxygen during the day and Bipap at night. The patient also has many medications she is on, as well as additional ones from her current hospital stay. After talking with the case manager, home health care is being arranged to help her after discharge.

Equipment needs (if applicable): The patient requires home oxygen and a Bipap machine. She stated that she is already set up at home for both of those devices. The patient also uses a walker to help with ambulation. She stated she has a walker to use at home as well.

Follow up plan: After discharge, the plan is for the patient to follow up with her primary care physician.

Education needs: This patient would benefit from education on ways to prevent future COPD exacerbations.

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 • Listed in order by priority – highest priority to lowest priority pertinent to this client	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective breathing pattern related to decreased lung expansion occurring with chronic airflow limitations as evidence by	The patient presented to the ER with shortness of breath and chest pain. She was placed given breathing treatments and medications	**1.** Monitor patients' response to prescribed O2 therapy. Titrate oxygen to keep oxygen saturation greater 90%. **2.** Administer	**1.** Following treatment the patients breathing pattern improves as evidence by reduction or absences of dyspnea with O2 saturation greater than	The patient remains on 3L of O2 via nasal cannula. This has consistently kept her oxygen saturation above 90%. Respiratory therapy continues to provide breathing

patient experiencing shortness of breath and difficulty breathing.	to help open her airways and initiate breathing.	combination inhaled glucocorticoid steroid and bronchodilator therapy as prescribed	90% with or without oxygen therapy	treatments to the patient that help her feeling short of breath.
2. Impaired gas exchange related to altered oxygen supply occurring with small airway inflammation and alveolar edema as evidence by dyspnea and abnormal ABG levels.	The patients ABG test showed abnormal results and displayed abnormal breathing.	**1.** Position patient in high fowlers position, with patient leaning forward and elbows propped on the over the bed table. Pad the table with pillows and record the patient's response to positioning. **2.**Deliver and monitor O2 and humidity as prescribed.	**1.** Before discharge from the hospital the patients ABG values are PaO3 above 60 mm HG, PaCO2 between 35 and 45 mm HG, and pH between 7.35 and 7.45.	The position spends most of her day in high fowlers and sleeps with the head of the bed elevated. She was provided with humidity at the at the beginning of her hospital stay. Humidity was removed the morning of 1/25 and the patient seems to be tolerating it well.
3. Risk for infection related to chronic disease process as evidence by the patient having end stage COPD.	The patient is diagnosed with end stage COPD and she struggles to clear her secretions from bacteria and other pollutants.	**1.** Review the importance of breathing exercises, effective cough, frequent position changes, and adequate fluid intake. **2.** Observe the color, character, and odor of sputum.	**1.** Before being discharged, the patient will display effective cough and breathing exercises to help manage and clear secretions.	Respiratory therapy has been working with the patient on effective cough techniques. Patient uses her incentive spirometer every 1 to 2 hours during the day.
4. Activity intolerance	The patient's oxygen	**1.** Monitor patients'	**1.** Before being discharged the	Physical therapy has been

related to imbalance between oxygen supply and demand due to inefficient work of breathing as evidence by increased dyspnea upon ambulation.	saturation drops significantly when she ambulates. She struggles with dyspnea during times of activity and spends a lot of the day being immobile.	respiratory response to activity including assessment of oxygen saturations. **2.** Maintain prescribed activity levels and explain the reasoning to the patient.	patient reports decreasing dyspnea during activity or exercise and rates her lever of exertion at a 3 or less on a 0-10 scale.	working each day with the patient to help improve her mobility. The patient still struggles to ambulate without being told, but states she wants to get in better shape and be able to walk further distances.
5. Imbalance nutrition related to decreased intake occurring with fatigue and anorexia as evidence by patient being underweight.	The patient is underweight with a BMI of 16.2. She also has little appetite and spends a lot of time sleeping.	**1.** Provide food in small, frequent meals that are nutritious and easy to consume. **2.** Request consultation with dietitian as needed.	**1.** For a minimum of 24 hours before discharge from the hospital, the patient has adequate nutrition as evidence by stable weight.	The patient is offered small snacks between meals and makes better food choices at mealtimes. Dietary recommended adding an ensure shake to her add an easy snack throughout the day.

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*. Elsevier.

Concept Map (20 Points):

Subjective Data

The patient presented to the emergency room on 1/22/2022 with shortness of breath that had been going on for two days. Patient stated that she struggles with this a lot. Along with being short of breath, the patient complained of mild chest pain, rated at a 3 out of 10 on the number scale. She also noted that she was having congestion that worsened at night. The patient uses a BiPap at night however, her congestion made it difficult to use. The patient also tried using an inhaler however her symptoms did not improve. During the day she is chronically on 3L of O2 from end stage COPD. Patient states that both oxygen and Bipap were not helping to improve her symptoms.

Nursing Diagnosis/Outcomes

Ineffective breathing pattern related to decreased lung expansion occurring with chronic airflow limitations as evidence by patient experiencing shortness of breath and difficulty breathing.

Outcome: Following treatment the patients breathing pattern improves as evidence by reduction or absences of dyspnea with O2 saturation greater than 90% with or without oxygen therapy

Impaired gas exchange related to altered oxygen supply occurring with small airway inflammation and alveolar edema as evidence by dyspnea and abnormal ABG levels.

Outcome: . Before discharge from the hospital the patients ABG values are PaO3 above 60 mm HG, PaCO2 between 35 and 45 mm HG, and pH between 7.35 and 7.45.

Risk for infection related to chronic disease process as evidence by the patient having end stage COPD.

Outcome: Before being discharged, the patient will display effective cough and breathing exercises to help manage and clear secretions.

Activity intolerance related to imbalance between oxygen supply and demand due to inefficient work of breathing as evidence by increased dyspnea upon ambulation.

Outcome: Before being discharged the patient reports decreasing dyspnea during activity or exercise and rates her lever of exertion at a 3 or less on a 0-10 scale.

Imbalance nutrition related to decreased intake occurring with fatigue and anorexia as evidence by patient being underweight.

Outcome: . For a minimum of 24 hours before discharge from the hospital, the patient has adequate nutrition as evidence by stable weight.

Objective Data

-Abnormal labs: RBC, Hgb, WBC, neutrophils, lymphocytes, chloride, CO2, creatinine, pH, paO2, HCO3, and SaO2
-Abnormal vitals: BP 132/64
-Expiratory wheeze in all lungs bilaterally
-Nonproductive cough
-Abnormal EKG with right atrial enlargement and ST abnormality
-Chest x-ray shows hyperexpanded lungs
-ambulates with 1 assist
-197.7 cm , 31.6 kg

Client Information

The patient is a 60 year old, Caucasian, single female. She is allergic to adhesive bandages and is a full code. Her past medical history entails arthritis, asthma, CAD, COPD, high cholesterol, hypertension, and diverticulitis. She smokes a ¼ pack of cigarettes per day and uses marijuana most days of the week. She was admitted to the hospital for COPD exacerbation.

Nursing Interventions

Monitor patients' response to prescribed O2 therapy. Titrate oxygen to keep oxygen saturation greater 90%.

Administer combination inhaled glucocorticoid steroid and bronchodilator therapy as prescribed

Position patient in high fowlers position, with patient leaning forward and elbows propped on the over the bed table. Pad the table with pillows and record the patient's response to positioning.

Deliver and monitor O2 and humidity as prescribed.

Review the importance of breathing exercises, effective cough, frequent position changes, and adequate fluid intake.

Observe the color, character, and odor of sputum

Monitor patients' respiratory response to activity including assessment of oxygen saturations.

Maintain prescribed activity levels and explain the reasoning to the patient.

Provide food in small, frequent meals that are nutritious and easy to consume.

Request consultation with dietitian as needed.