

N431 Care Plan #1

Lakeview College of Nursing

Katie Finn

Demographics (3 points)

Date of Admission 6/9/2022	Client Initials WB	Age 69 years old	Gender Female
Race/Ethnicity Caucasian	Occupation Retired	Marital Status Married	Allergies Sulfa drugs – Nausea
Code Status Full Code	Height 173 cm	Weight 71.2 kg	

Medical History (5 Points)

Past Medical History: Natural vaginal birth of one child 50 years ago

Past Surgical History: tonsillectomy/adenoidectomy (1964), appendectomy (1967), complete hysterectomy (1989), colonoscopy/polypectomy (date unknown), colonoscopy with biopsy (1/5/21), and bronchoscopy with biopsy (6/10/22).

Family History: Mother: Alzheimer's disease (died in 2018); father: colon cancer (died in 1989)

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

3-4 cigarettes/day for as long as the patient remembers. Denies any alcohol or recreational drug use.

Assistive Devices: Full set of dentures and glasses

Living Situation: Lives in a home with spouse

Education Level: Dropped out of high school around 10th grade

Admission Assessment

Chief Complaint (2 points): Cough and shortness of breath

History of Present Illness – OLD CARTS (10 points): A 69-year-old female came to the walk-in clinic at Sarah Bush Lincoln on 6/9/22 for a cough and shortness of breath. The cough had started five days prior, and the patient had been coughing up thick mucus. The patient reported no aggravating factors or associated factors besides the shortness of breath. The patient did not

report any treatments attempted for the cough and mucus. The patient's oxygen (O₂) saturation was taken and was 80%. The clinic sent the patient to the Emergency Department (ED) immediately and the ED administered 2L of O₂ via nasal cannula. The patient denied any symptoms of pneumonia, dizziness, lightheadedness, or syncope.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Hypoxia

Secondary Diagnosis (if applicable): Small-cell carcinoma of the lungs

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

Hypoxia is oxygen deprivation to the body. It is the most common cause of cell injury and can be caused by inadequate oxygen diffusion at the alveoli. Hypoxia, if untreated, will lead to anaerobic metabolism and a buildup of lactic acid will form from this metabolism. Unfortunately, cell life cannot be sustained on this type of metabolism long term (Capriotti, 2020). If hypoxia continues, brain damage will occur (Hinkle et al., 2020). This patient's hypoxia is most likely caused by inflammation of the airways and the non-small cell carcinoma in the right lung.

With chronic hypoxia, the patient will have dyspnea on exertion, productive cough, and can have tachycardia, tachypnea, and low oxygen saturation (Bhutta et al., 2022). This patient had dyspnea and low oxygen saturation when presenting to the walk-in clinic. The lungs may have crackles, wheezing, and/or rhonchi (Bhutta et al., 2022). The patient did have some wheezes upon auscultation.

Chest x-rays and CT scans help find the source of the hypoxia. CT angiograms of the chest allow for detecting pulmonary embolisms. The six-minute walk test helps give information on the patient's oxygen saturation with exercise (Bhutta et al., 2022). This patient had a chest x-

ray, a CT angiogram of the chest, and a six-minute walk test. The x-ray showed opacities in the right lung, the CT angiogram found an irregular shape of the right lung, and the patient failed the walk test indicating the need for supplemental oxygen.

To treat hypoxia, the main three categories are maintaining patent airways, increasing diffusion capacity, and improving the oxygen content of the air being breathed. Ensuring patency includes good suctioning and preventing any obstructions in the airways. Bronchodilators assist with this. Supplemental oxygen can improve the content of the air being breathed, and steroids can be used to help improve the oxygen diffusion in the lungs (Bhutta et al., 2022). This patient is on a bronchodilator, a steroid, and supplemental oxygen via nasal cannula.

Pathophysiology References (2) (APA):

Bhutta, B. S., Faysal Alghoula, & Ilya Berim. (2022). *Hypoxia*. StatPearls Publishing.
[https://www.ncbi.nlm.nih.gov/books/NBK482316/#:~:text=Hypoxia%20is%20a%20state%20in,in%20the%20blood%20\(hypoxemia\).](https://www.ncbi.nlm.nih.gov/books/NBK482316/#:~:text=Hypoxia%20is%20a%20state%20in,in%20the%20blood%20(hypoxemia).)

Capriotti, T. M. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F. A. Davis Company.
<https://fadavisreader.vitalsource.com/books/9781719641470>

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

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	3.80 – 5.41 x 10 ⁶ /mcL	4.86 x 10 ⁶ /mcL	4.30 x 10 ⁶ /mcL	N/A
Hgb	11.3 – 15.2 g/dL	14.5 g/dL	13.0 g/dL	N/A
Hct	33.2% – 45.3%	42.2%	37.4%	N/A
Platelets	149 – 393 K/mcL	507 K/mcL	577 K/mcL	This may be elevated due to the non-small cell carcinoma in the patient's right lung (Pagana et al., 2019).
WBC	4.0 – 11.7 K/mcL	8.1 K/mcL	14.3 K/mcL	The patient may have increased WBCs due to inflammation in the lung tissue and bronchioles from smoking. It can be the stress of being in the hospital. It can also be increased due to the use of a glucocorticoid while at the hospital and the patient's diagnosis of lung cancer (Pagana et al., 2019).
Neutrophils	2.4 – 8.4 x 10 ³ /mcL	5.0 x 10 ³ /mcL	13.2 x 10 ³ /mcL	Neutrophils may be increased due to stress, inflammation of the patient's lung tissue and bronchioles, the use of a glucocorticoid, and the patient's diagnosis of lung cancer (Pagana et al., 2019)
Lymphocytes	0.8 – 3.7 x 10 ³ /mcL	2.3 x 10 ³ /mcL	0.8 x 10 ³ /mcL	N/A
Monocytes	0.3 – 1.1 x 10 ³ /mcL	0.6 x 10 ³ /mcL	0.5 x 10 ³ /mcL	N/A
Eosinophils	0.0 – 0.5 x 10 ³ /mcL	0.1 x 10 ³ /mcL	N/A	N/A
Bands	3% – 5%	N/A	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 mmol/L	141 mmol/L	140 mmol/L	N/A
K+	3.4 – 5.1 mmol/L	3.3 mmol/L	4.1 mmol/L	N/A
Cl-	98 – 107 mmol/L	102 mmol/L	98 mmol/L	N/A

CO2	21 – 31 mmol/L	31 mmol/L	32 mmol/L	The CO2 level may be slightly increased due to the inflammation in the patient's bronchioles not allowing effective ventilation to blow off CO2. The steroid use is also related to elevated CO2 levels (Pagana et al., 2019).
Glucose	74 – 109 mg/dL	86 mg/L	135 mg/L	The elevated level can be related to corticosteroid use and acute stress (Pagana et al., 2019).
BUN	7 – 25 mg/dL	10 mg/L	22 mg/L	N/A
Creatinine	0.60 – 1.20 mg/dL	0.66 mg/L	0.70 mg/L	N/A
Albumin	3.5 – 5.2 g/dL	4.2 g/dL	N/A	N/A
Calcium	8.6 – 10.3 mg/dL	9.5 g/dL	N/A	N/A
Mag	1.6 – 2.2 mg/dL	N/A	N/A	N/A
Phosphate	2.5 – 4.5 mg/dL	N/A	N/A	N/A
Bilirubin	0.3 – 1.0 mg/dL	0.4 mg/dL	N/A	N/A
Alk Phos	34 – 106 units/L	86 units/L	N/A	N/A
AST	13 – 39 units/L	14 units/L	N/A	N/A
ALT	7 – 52 units/L	5 units/L	N/A	N/A
Amylase	100 – 300 units/L	N/A	N/A	N/A
Lipase	0 – 60 units/L	N/A	N/A	N/A
Lactic Acid	3 – 23 units/L	N/A	N/A	N/A
Troponin	0.000 – 0.030 ng/mL	< 0.010 ng/mL	N/A	N/A
CK-MB	96% – 100%	N/A	N/A	N/A
Total CK	36 – 160 units/L	N/A	N/A	N/A

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	0.9 – 1.1	N/A	N/A	N/A
PT	10 – 13 seconds	N/A	N/A	N/A
PTT	23.0 – 32.4 seconds	N/A	N/A	N/A
D-Dimer	0.0 – 0.5 mcg/mL	N/A	N/A	N/A
BNP	< 100 pg/mL	N/A	N/A	N/A
HDL	> 55 mg/dL	N/A	N/A	N/A
LDL	< 130 mg/dL	N/A	N/A	N/A
Cholesterol	< 200 mg/dL	N/A	N/A	N/A
Triglycerides	35-135 mg/dL	N/A	N/A	N/A
Hgb A1c	4% to 5.9%	N/A	N/A	N/A
TSH	2-10 µU/mL	N/A	N/A	N/A

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	Light yellow to amber; clear to translucent	N/A	N/A	N/A
pH	5.0 – 8.0	N/A	N/A	N/A
Specific Gravity	1.005 – 1.030	N/A	N/A	N/A
Glucose	Negative	N/A	N/A	N/A
Protein	Negative	N/A	N/A	N/A
Ketones	Negative	N/A	N/A	N/A
WBC	Negative	N/A	N/A	N/A

RBC	Negative	N/A	N/A	N/A
Leukoesterase	Negative	N/A	N/A	N/A

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	N/A	N/A	N/A
PaO2	80 – 100 mm Hg	N/A	N/A	N/A
PaCO2	35 – 45 mm Hg	N/A	N/A	N/A
HCO3	21 – 28 mEq/L	N/A	N/A	N/A
SaO2	95% – 100%	N/A	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	N/A
Blood Culture	Negative	N/A	N/A	N/A
Sputum Culture	Negative	Negative	N/A	N/A
Stool Culture	Negative	N/A	N/A	N/A

Lab Correlations Reference (1) (APA):

Pagana, K. D., Pagana, T. J., & Pagana, T. N. (2019). *Mosby's diagnostic and laboratory test reference* (14th ed.). Elsevier.

Sarah Bush Lincoln Health Center (2022). *Laboratory Results*. Sarah Bush Lincoln Health Center.

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

Chest x-ray (6/9/22): The patient had a normal size heart, lung opacity in the right upper lobe with volume loss, severe hyperinflation of the lungs, and a trace pleural effusion or scarring at the left lung bases. No pneumothorax was present.

CT pulmonary angiogram with contrast (6/9/22): There was an abrupt obstruction of the right upper lobe bronchus at the left hilum. The intermedius bronchus, right middle lobe, right lower lobe and left sided bronchi were patent. There was a complete collapse of the right upper lobe that corresponded with the opacity in the chest x-ray. The posterior margin of the right upper lobe showed very irregular spiculated contour that is highly concerning for underlying neoplasm. There was moderate centrilobar emphysema noted with no pleural effusion or pneumothorax. The right upper paratracheal and precarinal lymph nodes were slightly enlarged at 8-9 mm across the short axis. This indicates regional lymph node metastases. There was a mass-like thickening of proximal esophagus with inseparable conglomerate adenopathy.

Bronchoscopy with biopsy (6/10/22): The biopsy showed poorly differentiated carcinoma sheets, nests, and cords. The cells are malignant with bizarre nuclei. The cancer is non-small cell carcinoma.

6-minute walk test (6/13/22): The patient failed this test.

Diagnostic Test Correlation (5 points):

Chest x-ray: This test is commonly used to determine the heart's size, shape, and position. It allows for the provider to diagnosis or eliminate any cardiac or pericardial calcifications. It can also visualize the chest for any opacities or pneumothoraxes (Hinkle et al., 2022). The patient has had congestive, productive cough for the past five days with shortness of breath and hypoxia. The provider wanted to rule out pneumonia.

CT pulmonary angiogram with contrast: This test is used to look for any arterial obstructions and obtain an assessment of the perfusion. It can be used to diagnose a pulmonary embolism (PE) (Hinkle et al., 2022). The provider wanted to rule out a PE due to the patient's shortness of breath and the opacity in the right lung concerning for obstructing central mass.

Bronchoscopy with biopsy: This procedure looks at the tissues of the larynx, trachea, and bronchi. This can analyze the nature, location, and extent of the pathologic process. It can also collect secretions and get tissue samples to be diagnosed. It can determine if a tumor can be resected and find the source of hemoptysis (Hinkle et al., 2022). The provider wanted to visualize the patient's right bronchi due to the irregular spiculated contour of the right upper lobe seen in the CT scan.

6-minute walk test: This test gives information about the oxygen saturation compared to the patient's exercise and the amount of distance a patient can walk in six minutes. This gives information on how much supplemental oxygen a patient will need (Hinkle et al., 2022). This patient did a walk test to evaluate how much supplemental oxygen would be necessary to send home with her.

Diagnostic Test Reference (1) (APA):

Hinkle, J. L., Cheever, K. H., & Overbaugh, K. (2022). *Brunner & Suddarth's textbook of medical-surgical nursing* (15th ed.). Wolters Kluwer.

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

Home Medications (5 required) *PRN prescribed medications

Brand/ Generic	*Tylenol/ Acetaminophen	*Soln-Inhalation/ Albuterol sulfate	*Colace/ Docusate sodium	*Mucinex/ Guaifenesin	*N/A / Melatonin
Dose	650 mg	2.5 mg	100 mg	600 mg	6 mg
Frequency	Q6H PRN	Q4H PRN	Twice a day PRN	Q12H PRN	PRN
Route	Oral	Nebulized inhalation	Oral	Oral	Oral
Class- ification	Nonsalicylate, para- aminophenol derivative/ antipyretic, nonopioid analgesic (Jones & Bartlett, 2020)	Adrenergic/ Bronchodilator (Jones & Bartlett, 2020)	Surfactant/ Laxative, stool softener (Jones & Bartlett, 2020)	Expectorant/ Mucus thinner (Frandsen & Pennington, 2020)	Endogenous hormone/ sleep- aid, supplement (Frandsen & Pennington, 2020)
Mechanism of Action	Acetaminophen inhibits the cyclo- oxygenase enzyme to stop prostaglandin production and interferes with pain impulses in the peripheral nervous system. It also acts on the hypothalamus to stop the synthesis of prostaglandin E2 to reduce fevers (Jones & Bartlett, 2020).	Stimulates the beta 2 receptors to decrease intracellular calcium levels and increase the cAMP levels. This relaxes the bronchial muscles and inhibits histamine release (Jones & Bartlett, 2020).	Decreases the surface tension between oil and water in feces to let the fluid penetrate the stool leading to a softer stool (Jones & Bartlett, 2020).	It irritates the gastric vagal receptors to stimulate the respiratory tract fluid to decrease the viscosity of respiratory tract secretions (Frandsen & Pennington, 2020).	Melatonin regulates the sleep-wake cycle by causing drowsiness and lower the body temperature (Frandsen & Pennington, 2020)
Reason Client Taking	Fever and mild pain	Wheezing, shortness of breath, and hypoxia	Constipation	Productive cough	Treat insomnia
Contra- indications (2)	1. Liver disease 2. Hypersensitivity to acetaminophen (Jones & Bartlett, 2020)	1. Hypersensitivity to albuterol 2. History of seizures (Jones & Bartlett, 2020)	1. Fecal impaction 2. Intestinal obstruction (Jones & Bartlett, 2020)	1. Hypersensitivity to guaifenesin 2. Overactive thyroid gland (Frandsen & Pennington, 2020)	1. History of cerebrovascular disease 2. Hepatic insufficiency (Frandsen & Pennington, 2020)
Side Effects/ Adverse Reactions	1. Hypotension 2. Hepatotoxicity (Jones & Bartlett, 2020)	1. Arrhythmias 2. Hypotension (Jones & Bartlett, 2020)	1. Syncope 2. Abdominal cramping (Jones &	1. Skin rash 2. Headache (Frandsen & Pennington,	1. Altered sleep pattern 2. Confusion (Frandsen &

(2)			Bartlett, 2020)	2020)	Pennington, 2020)
Nursing Considerations (2)	<ol style="list-style-type: none"> 1. Use cautiously in patients with hepatic impairment 2. Monitor renal function if used long-term (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Monitor serum potassium levels for hypokalemia 2. Drug tolerance can develop with long-term use (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Assess for laxative abuse 2. Excessive and long-term use can cause dependency on laxatives (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. The medication does not need to be taken with meals 2. Drink plenty of water to help loosen the mucus (Frandsen & Pennington, 2020) 	<ol style="list-style-type: none"> 1. Use cautiously with patients with renal impairment 2. Use cautiously with patients on CNS depressant drugs (Frandsen & Pennington, 2020)
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	<ol style="list-style-type: none"> 1. Hepatic function labs 2. Renal function labs (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Serum potassium levels 2. Blood glucose levels (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Laxative abuse syndrome 2. Electrolyte levels (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Assess for reduction of cough episodes 2. Assess for decreased effort to mobilize secretion (Frandsen & Pennington, 2020) 	<ol style="list-style-type: none"> 1. Assess sleep patient's sleep pattern 2. Monitor glucose levels (Frandsen & Pennington, 2020)
Client Teaching Needs (2)	<ol style="list-style-type: none"> 1. Do not use more than the prescribed/ recommended amount 2. Signs of hepatotoxicity (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Teach how to use the inhaler 2. Teach the patient to rinse out their mouth after using the inhaler (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. Do not use if they have abdominal pain 2. Take with full glass of milk or water (Jones & Bartlett, 2020) 	<ol style="list-style-type: none"> 1. The drug may help symptoms but will not cure the disorder causing the symptoms 2. Do not increase the dosage if the symptoms are not relieved with prescribed/ recommended amount (Frandsen & Pennington, 2020) 	<ol style="list-style-type: none"> 1. Avoid driving or operating machinery for at least 4 hours after taking it 2. Avoid using it with other herbal/ health supplements (Frandsen & Pennington, 2020)

Hospital Medications (5 required)

Brand/ Generic	Protonix/ Pantoprazole	Solumedrol/ Methyl- prednisolone	Oracea/ Doxycycline	Habitrol/ Nicotine patch	*Diphenhydramine/ Benadryl
Dose	40 mg	40 mg	100 mg	14 mg	25 mg

Frequency	Once a day	Q8H	Twice a day	Every 24 hours	Q6H PRN
Route	Oral	IV push	Oral	Transdermal patch	Oral
Classification	Proton pump inhibitor/ Antiulcer (Jones & Bartlett, 2020)	Glucocorticoid/ Corticosteroid (Jones & Bartlett, 2020)	Tetracycline/ Antibiotic (Jones & Bartlett, 2020)	Nicotinic agonist/ Smoking cessation adjunct (Jones & Bartlett, 2020)	Antihistamine/ Antianaphylaxis adjunct, antihistamine (Jones & Bartlett, 2020)
Mechanism of Action	Inhibits the proton pump in the gastric parietal cells preventing HCl from forming (Jones & Bartlett, 2020).	Inhibits the accumulation of monocytes and neutrophils at inflammation sites by binding to the intracellular glucocorticoid receptors. It also inhibits the synthesis of inflammatory response mediators like cytokines, interleukins, and prostaglandins (Jones & Bartlett, 2020).	It has a bacteriostatic effect against many gram-positive and gram-negative bacteria. It passes through the bacterial lipid bilayer and binds to 30S ribosomal subunits to inhibit bacterial protein synthesis (Jones & Bartlett, 2020).	The drug will bind selectively to nicotinic-cholinergic receptors in the autonomic ganglia in the adrenal medulla. This gives a lower dose of nicotine than cigarettes, thus reducing nicotine cravings and symptoms (Jones & Bartlett, 2020).	The drug binds to central and peripheral H1 receptors to prevent histamine from binding. This produces an antihistamine effects like reducing flares, itching, wheals, lacrimal, and salivary gland secretions (Jones & Bartlett, 2020).
Reason Client Taking	Prophylactically for gastric ulcers	Treat the inflammation in the airways	Prevent infection from excess mucus production	To treat the nicotine-withdraw symptoms	To treat itching
Contraindications (2)	1. Hypersensitivity to the drug 2. Patient is on rilpivirine-containing products (Jones & Bartlett, 2020)	1. Hypersensitivity to cow's milk or other dairy products 2. Idiopathic thrombocytopenic purpura (Jones & Bartlett, 2020)	1. Hypersensitivity to doxycycline 2. Hypersensitivity to tetracyclines (Jones & Bartlett, 2020)	1. Hypersensitivity to nicotine 2. Hypersensitivity to soy (Jones & Bartlett, 2020)	1. Breastfeeding 2. Hypersensitivity to diphenhydramine (Jones & Bartlett, 2020)
Side Effects/ Adverse Reactions (2)	1. Hepatic failure 2. Rhabdomyolysis (Jones & Bartlett, 2020)	1. Arrhythmias 2. Heart failure (Jones & Bartlett, 2020)	1. Pericarditis 2. Hepatotoxicity (Jones & Bartlett, 2020)	1. Arrhythmias 2. Bronchospasms (Jones & Bartlett, 2020)	1. Arrhythmias 2. Agranulocytosis (Jones & Bartlett, 2020)
Nursing Considerations (2)	1. Do not administer longer than medically necessary	1. Should not be used to treat traumatic brain injuries 2. Give tablets with	1. Avoid giving to breastfeeding women 2. Administer without regard to	1. Use cautiously in patients with hyperthyroidism 2. Avoid possible burns by	1. Give parenteral forms when oral ingestion is not possible 2. Keep elixir and

	2. Monitor PT/INR during therapy if patient is on an anticoagulant (Jones & Bartlett, 2020)	food to prevent GI upset (Jones & Bartlett, 2020)	meals (Jones & Bartlett, 2020)	removing the patch before an MRI (Jones & Bartlett, 2020)	parenteral forms from light (Jones & Bartlett, 2020)
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	1. Monitor for bone fractures if using multiple doses, a day for a year or more 2. Monitor for diarrhea from <i>C. difficile</i> (Jones & Bartlett, 2020)	1. Monitor for sodium retention in patients with heart failure or renal insufficiency 2. Monitor for signs of infection (Jones & Bartlett, 2020)	1. Monitor for diarrhea 2. Monitor for adverse skin reaction (Jones & Bartlett, 2020)	1. Assess for arrhythmias 2. Assess patch site when changing and rotating sites (Jones & Bartlett, 2020)	1. Monitor for effectiveness of the drug 2. Monitor for an allergic reaction (Jones & Bartlett, 2020)
Client Teaching Needs (2)	1. Swallow the tablets whole without chewing or crushing 2. Notify all providers of this drug use (Jones & Bartlett, 2020)	1. Instruct not to stop medication abruptly 2. Tell patient not to get vaccinations unless approved by the prescriber (Jones & Bartlett, 2020)	1. Tell provider immediately about anorexia, epigastric distress, nausea, vomiting, or visual changes 2. Instruct to take full course of medication (Jones & Bartlett, 2020)	1. Notify the prescriber about other conditions or drugs they take 2. Instruct the patient to stop using drug and notify the prescriber if or seek medical care immediately if they develop an allergic reaction (Jones & Bartlett, 2020)	1. Take the drug with food to prevent GI distress 2. Avoid taking other OTC drugs that have diphenhydramine in them (Jones & Bartlett, 2020)

Medications Reference (1) (APA):

Frandsen, C. & Pennington, S. S. (2020). *Abrams’ clinical drug therapy: Rationales for nursing practice* (12th ed.). Wolters Kluwer.

Jones & Bartlett Learning. (2020). *2021 Nurse’s drug handbook* (20th ed.). Jones & Bartlett Learning.

Assessment

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

GENERAL:	The patient is alert and oriented to self, place,
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<p>Alertness: Orientation: Distress: Overall appearance:</p>	<p>time, and situation (A&O x4). The patient is calm and did not appear distressed. Overall appearance is groomed, clean, and healthy.</p>
<p>INTEGUMENTARY: Skin color: Character: Temperature: Turgor: Rashes: Bruises: Wounds: Braden Score: Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: N/A</p>	<p>The patient's skin color is normal for ethnicity. Skin is warm, dry, and intact with loose turgor. There are some small, penny-sized bruises randomly on the patient's biceps. No other rashes, bruises, or wounds found. The Braden score is 19 indicating no risk of pressure ulcers and no drains present.</p>
<p>HEENT: Head/Neck: Ears: Eyes: Nose: Teeth:</p>	<p>Patient's head is normocephalic with the trachea midline. Ears are symmetrical with no visible drainage or cerumen. Patient did have some difficulty hearing softer talking but is responsive to sounds. Patient's pupils are 2 mm when exhibiting PERRLA. Eyes display full extraocular movements and are symmetrical with no drainage or inflammation. Conjunctiva is pink and moist. Nose is midline with no deviated septum and patent nares with some translucent mucus. Patient has full upper dentures but were left at home. Patient's tongue and buccal mucosa is moist, pink, and has no lesions. Tonsils are absent due to previous tonsillectomy (1964).</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>S1 and S2 heart sounds were audible with no S3/S4 or murmurs sounds. Cardiac rhythm is regular and steady. Radial and pedal pulses bilaterally exhibit +3 strength and are regular. Capillary refill is <3 seconds on hands bilaterally. No jugular vein distention observed.</p>
<p>RESPIRATORY: Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character</p>	<p>Diminished sounds were auscultated in all lobes both posterior and anterior. Patient was in semi-Fowler's position when respiration rate was assessed and was measured at 16 and 18 respirations per minute. Breaths are regular and even with no accessory muscles used. The patient denies having breathing difficulties but does have</p>

	<p>a barrel chest. Patient does have a persistent, productive cough with sputum production.</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"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p>	<p>Patient has regular diet at home and at the hospital. Patient’s height is 173 cm and weight 71.2 kg with a BMI of 23.8 which puts the patient in the normal category. When auscultated, clicks and gurgles were heard at a rate of 5-30 per minute in all four abdominal quadrants. Patient denies vomiting and diarrhea nor pain with bowel movements. The last bowel movement was the day before (6/13/22). Abdomen is nontender, soft, and not distended when palpated. There are no drains, incisions, or wounds on the abdomen. Patient does not have any ostomies, nasogastric or feeding tubes.</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>Patient reports urine as yellow, clear, and with no odor. Patient is continent and voided once this shift. Patient denies any pain or difficulty when urinating. Genitals were not inspected. Patient does not have any catheters and is not on dialysis.</p>
<p>MUSCULOSKELETAL: Neurovascular status: ROM: Supportive devices: Strength: ADL Assistance: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input type="checkbox"/> Fall Score: Activity/Mobility Status: Independent (up ad lib) <input checked="" type="checkbox"/> Needs assistance with equipment <input type="checkbox"/> Needs support to stand and walk <input type="checkbox"/></p>	<p>Neurovascular status is intact, and patient is in control of his senses. Patient does not report any paresthesia or paralysis nor displays pallor. The patient has full range of motion with 5/5 strength in upper and lower extremities bilaterally. Patient’s Morse Fall score is 45 which puts her as a high fall risk. Patient uses gait belt requires one assistant. Patient does not need help with ADLs.</p>
<p>NEUROLOGICAL:</p>	<p>Patient has 5/5 strength in all extremities, and</p>

MAEW: Y <input checked="" type="checkbox"/> N <input 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 type="checkbox"/> Both <input type="checkbox"/> Orientation: Mental Status: Speech: Sensory: LOC:	they are all equal in strength bilaterally. Eyes exhibit PERRLA signs and articulates well. Patient is A&O x4 as discussed before. Patient is also alert to her surroundings and calm. Patient can sense touch all over each extremity. Patient is focused on getting rest and getting rid of the cancer. She is stressed and worried, but hopeful.
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 reports that she is not coping well, but is verbalizing worries and questions. Her husband stays with her at the hospital during the day. The patient’s daughter, granddaughter, great-grandkids, and grandson have visited her. Her daughter also called the patient regularly.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0900	97 bpm pulse oximetry	149/73 right arm	16 breaths/min	36.6 C tympanic	95% 6L nasal cannula
1210	115 bpm pulse oximetry	152/80 right arm	18 breathes/min	37.2 C tympanic	95% 5L nasal cannula

Vital Sign Trends: The patient’s pulse went up, the blood pressure stayed high, and all other vitals did not fluctuate significantly.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0900	Numeric	N/A	0/10	N/A	N/A
1210	Numeric	N/A	0/10	N/A	N/A

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.:	20 gauge Right antecubital fossa 6/13/22 IV is patent and has a saline lock No signs of erythema or drainage

IV dressing assessment:	The dressing is clean, dry, and intact
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Intake and Output (2 points)

Intake (in mL)	Output (in mL)
11 mL via IV 100 mL of water	Void 1x this shift

Nursing Care

Summary of Care (2 points)

Overview of care: The patient received daily medications at 0900. Vitals were obtained at 0900 and 1210. The patient had respiratory therapy around 0830 and had her IV removed around 1130.

Procedures/testing done: The patient had a respiratory therapy nebulizing treatment around 0830.

Complaints/Issues: The patient reported leaking of her IV around 1100 and some pain with it. The IV was reported to the primary RN and was removed around 1130.

Vital signs (stable/unstable): Vitals were stable except for the elevation of the pulse and the blood pressure stayed elevated.

Tolerating diet, activity, etc.: The patient is tolerating diet and exercise with supplemental oxygen.

Physician notifications: There are no physician notifications.

Future plans for client: The patient will follow up for the lung tuber and new COPD diagnosis.

Discharge Planning (2 points)

Discharge location: The patient will be sent home.

Home health needs (if applicable): The patient will not need home health.

Equipment needs (if applicable): The patient will be sent home with supplemental oxygen.

Follow up plan: The patient will follow up with pulmonology, Dr. Green, and her primary provider.

Education needs: The patient will need to be educated on proper oxygen use and storage.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis	Rationale	Interventions (2 per dx)	Outcome Goal (1 per dx)	Evaluation
1. Risk for hypoxia related to inflamed airways as evidenced by low O2 saturation and dyspnea.	The patient had an O2 sat of 80% when admitted into the hospital and reported shortness of breath.	1. Supplemental oxygen 2. Administration of a bronchodilator	1. Keep O2 sat above 92%	The patient had 95% O2 saturation during vitals indicating the goal was met.
2. Risk for ineffective peripheral tissue perfusion related to lung mass as evidenced by biopsy showing non-small cell carcinoma of the lung.	The patient was diagnosed carcinoma in the lung which can decrease the lung's ability to do gas exchange.	1. Chemotherapy 2. Smoking cessation	1. Decrease the size of the mass	The patient has not started treatment for the mass but has stopped smoking. The goal has not been met.
3. Ineffective airway clearance related to excessive secretions as evidenced by the patient's productive cough and reporting a feeling that "I can't get it all out."	This diagnosis was chosen because the patient has reported thick mucus when coughing and difficulty breathing.	1. Administration of mucus-thinning medication 2. Administer the albuterol treatment	1. Airway will remain patent	The patient can breathe more easily and is able to cough up more mucus. Goal has been met.

<p>4. Risk for ineffective coping related to cancer diagnosis as evidenced by the patient reporting “I’m not coping well.”</p>	<p>The patient does not like being in the hospital and the cancer diagnosis does not help the patient’s mood.</p>	<p>1. Provide a structured routine 2. Assist patient in identifying successes</p>	<p>1. The patient develops appropriate coping strategies</p>	<p>These interventions have not been put in place yet. The goal has not been met.</p>
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Other References (APA):

Concept Map (20 Points):

Subjective Data

69-year-old female presented to the ED with SOB, hypoxia, and a productive cough. The patient has a history of smoking 3-4 cigarettes a day for as long as she can remember.

Nursing Diagnosis/Outcomes

Risk for hypoxia related to inflamed airways as evidenced by low O2 saturation and dyspnea.
Keep O2 sat above 92%
Risk for ineffective peripheral tissue perfusion related to lung mass as evidenced by biopsy showing non-small cell carcinoma of the lung.
Decrease the size of the mass in the lung
Ineffective airway clearance related to excessive secretions as evidenced by the patient's productive cough and reporting a feeling that "I can't get it all out."
Airway will remain patent
Risk for ineffective coping related to cancer diagnosis as evidenced by the patient reporting "I'm not coping well."
Client develops appropriate coping strategies

Objective Data

80% O2 sat at the ED
Bronchoscopy with biopsy showed a cancerous mass in the right lung
The patient failed the six minute walk test

Client Information

69-year-old female came to the walk-in clinic at Sarah Bush Lincoln on 6/9/22 for a cough and shortness of breath. The cough had started five days prior, and the patient had been coughing up thick mucus. The patient reported no aggravating factors or associated factors besides the shortness of breath. The patient did not report any treatments attempted for the cough and mucus. The patient's oxygen (O2) saturation was taken and was 80%. The clinic sent the patient to the Emergency Department (ED) immediately and the ED administered 2L of O2 via nasal cannula. The patient denied any symptoms of pneumonia, dizziness, lightheadedness, or syncope.

Nursing Interventions

Risk for hypoxia related to inflamed airways as evidenced by low O2 saturation and dyspnea.
Supplemental O2
Administration of bronchodilator
Risk for ineffective peripheral tissue perfusion related to lung mass as evidenced by biopsy showing non-small cell carcinoma of the lung.
Chemotherapy
Smoking cessation
Ineffective airway clearance related to excessive secretions as evidenced by the patient's productive cough and reporting a feeling that "I can't get it all out."
Administer mucus-thinning medication
Administer albuterol treatment
Risk for ineffective coping related to cancer diagnosis as evidenced by the patient reporting "I'm not coping well."
Provide a structured routine
Help identify patient's successes



