

N441 Care Plan

Lakeview College of Nursing

Morgan Phillips

Demographics (3 points)

Date of Admission September 2nd, 2021	Patient Initials J.C.	Age 54	Gender Female
Race/Ethnicity White/Baptist	Occupation Unemployed	Marital Status Widowed	Allergies Adhesive bandages Penicillin Pollen
Code Status Full Code	Height 165.5cm	Weight 82.2 kg	

Medical History (5 Points)

Past Medical History: Anemia, Anxiety, CKD stage 3, Depression, Fibromyalgia, GERD, HTN, Hyperthyroidism, Hypoglycemia, IBS, Obstructive sleep apnea on CPAP, Nicotine dependence, SP laparoscopic dependence, stage 1 mild COPD by Gold Classification

Past Surgical History: Manipulation of right shoulder (12/4/20), Arthroscopy of right shoulder rotator cuff repair (8/12/20), EGD (3/17/20), Left knee arthroscopy (1/16/20), Cervical fusion anterior spine (7/1/19), Colonoscopy biopsy (9/7/17), Cholecystectomy laparoscopy (8/10/17).

Family History: Maternal: HTN, Maternal Grandparent: Palpitations, Brother: HTN

Social History (tobacco/alcohol/drugs): Client is a current alcohol user of about 1-2 times per year, but due to client being sedated and intubated the client could not explain/elaborate to me what she drank. Client was a former smoker that quit more than 30 days ago. Client smoked 2-2.5 packs of cigarettes per day and started at age 16 and smoked until she was 54. There is no other documentation that the client uses any other street drugs (including marijuana) and I could not verify due to the client being intubated and sedated.

Assistive Devices: Client does not have documented the use of any assistive devices, however I am not able to verify due to the client being intubated and sedated.

Living Situation: Client's documentation states she lives as independent widow at her home.

Due to patient being intubated and sedated I was not able to verify with the client.

Education Level: Not able to assess due to client being intubated and sedated.

Admission Assessment:

Chief Complaint (2 points): Hypoxic and found minimally responsive at home with an EMS report of an oxygen saturation of 44% on room air.

History of present Illness (10 points):

A 54 year-old widow presents to Sarah Bush emergency department who was found hypoxic and minimally responsive. Client is unvaccinated against COVID-19 and has a past medical history of CKD, HTN, OSA, and COPD. This client had an onset of illness on August 25th when the client was diagnosed with COVID. At that moment in time the client was seen for pleuritic chest pain but was sent home with the "COVID at home" program. Client's duration of illness persistently increased from August 25th to current conditions. The SBLHS COVID at home program was not able to keep in touch with the client for two days, which prompted family to come out to check on the client. Family found the client minimally responsive and hypoxic . Family then called EMS and upon EMS arrival it was noted that the oxygen saturation on room air for EMS was 44%. Client was then placed on a non-rebreather which increased the oxygen saturation to 85%.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): COVID-19

Secondary Diagnosis (if applicable): Pneumonia

Third Diagnosis (if applicable): Acute hypoxic respiratory failure

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

COVID-19 is a respiratory, gastrointestinal, and neurological disease (Wiersinga et al., 2020). This disease is a new world pandemic that first started with a severe respiratory syndrome from Foshan, China (Wiersinga et al., 2020). This disease targets nasal, bronchial, and epithelial cells and pneumocytes through the viral structural spike protein. This protein binds to the angiotensin-converting enzyme two receptors (Wiersinga et al., 2020). The type 2 transmembranes serine protease present in the host cells then promotes a viral uptake to cleaving ACE2 and activating the SARS-CoV-2 protein, which mediates coronavirus entry into host cells (Wiersinga et al., 2020). Much like other viral illnesses, COVID causes a decrease in lymphocytes (Wiersinga et al., 2020). This patient resembles this because her lymphocytes are low because of the CORONAVIRUS. During the later stage of infection, the replication accelerates because epithelial-endothelial barrier integrity is compromised (Wiersinga et al., 2020). COVID autopsies show that the disease infects pulmonary capillary endothelial cells, accentuating the inflammatory response and triggering an influx of monocytes and neutrophils (Wiersinga et al., 2020).

Covid-19 can be symptomized differently in each person ranging from mild symptoms to severe illness. Symptoms may appear 2-14 days after exposure to the virus (CDC, 2021). Common symptoms include fever, chills, cough, shortness of breath, difficulty breathing, fatigue, muscle or body aches, headaches, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea (Centers for disease control prevention, 2021). Clients do not have to experience all these symptoms to have COVID. Sometimes clients may not even

know they have the virus, so that it can be so deadly. This client remarkably came into the hospital on the 25th of August because she was short of breath and had slight pleuritic chest pain. The client went home to manage her pain. However, the client quickly deteriorated. Those who experience severe symptoms must seek medical attention. Severe symptoms include trouble breathing, persistent pain or pressure in the chest, new confusion, inability to wake or stay awake, and pale skin color on their skin/lips/body parts (Centers for disease control prevention, 2021). This client is persistently showing signs and symptoms of COVID. The client first presented with chest pain and shortness of breath on the first hospital visit. While the client was at home trying to manage her symptoms, things got to the point where she could not seek help. The client's oxygen level correlates with her sickness. The client's oxygen level varies between 85%-95%, blood pressure is hypotensive, and the client is tachycardic. The client was struggling to breathe, so the client was on a ventilator to facilitate easier breathing.

Diagnosis for COVID-19 is through a test that one can get at various places in their community. Deciding to get tested for COVID-19 depends on the symptoms at hand and if he/she has been around someone with the illness (Center for disease control diagnosis and treatment, 2020). If a client feels they are portraying signs and symptoms of the disease, then they should call a local testing facility to be tested. The doctor may also decide to test the client if they are at higher risk of serious illnesses or if they are going to undergo a medical procedure (Center for disease control diagnosis and treatment, 2020). Testing for COVID-19 can be slightly uncomfortable. Testing for the virus requires the provider to take a nasopharyngeal swab sample, throat sample, or even a saliva sample (Center for disease control diagnosis and treatment, 2020). The lab takes these samples for testing.

Treatment for COVID-19 is not yet fully determined. Currently, the medical institution is working on vaccines used to help prevent COVID-19. The FDA has approved one vaccine and one drug to attempt to treat the virus (Centers for disease control prevention, 2021). The drug they are using is Remdesivir, an antiviral medication that essentially blocks the virus from copying itself into the client's body (Center for disease control prevention, 2021). In July 2021, officials decided the drug called Baricitinib also aids in slowing the reproduction of COVID multiplying in the client's cells (NIH, 2020). Throughout this client's stay, the caregivers have given Remdesivir and Baricitinib. Treatment also includes managing oxygenation, reducing fevers, and staying hydrated for the body to fight the illness (Centers for disease control prevention, 2021).

Pathophysiology References (2) (APA):

Baricitinib plus remdesivir shows promise for treating COVID-19. (2020, December 11).

National Institutes of Health (NIH).

<https://www.nih.gov/news-events/news-releases/baricitinib-plus-remdesivir-shows-promise-treating-covid-19>

Centers for Disease Control and Prevention. (2021, February 22). *Coronavirus Disease 2019 (COVID-19) – Symptoms*. Centers for Disease Control and Prevention; CDC.

<https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

Coronavirus - Diagnosis and treatment - Mayo Clinic. (2020). Www.mayoclinic.org.

<https://www.mayoclinic.org/diseases-conditions/coronavirus/diagnosis-treatment/drc-20479976>

Wiersinga, W. J., Rhodes, A., Cheng, A. C., Peacock, S. J., & Prescott, H. C. (2020).

Pathophysiology, Transmission, Diagnosis, and Treatment of Coronavirus Disease 2019

(COVID-19): A Review. *JAMA*, 324(8). <https://doi.org/10.1001/jama.2020.12839>

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	4.28-5.56	4.94	4.61	
Hgb	13.0-17.0	14.2	12.8	
Hct	38.1-48.9	42.2	39.8	
Platelets	149-393	280	406 high	This client has slightly elevated platelet levels due to client having a respiratory tract infection called COVID-19 and pneumonia (Yates, 2020).
WBC	4.0-11.7	7.2	23.5 high	This client's WBC is also elevated because the client has the respiratory infection causing increased WBC to fight the infection (Yates, 2020).
Neutrophils	45.3-79.0	77.0	N/A	
Lymphocytes	11.8-45.9	10.4 low	N/A	Client's lymphocytes are elevated in response to viral respiratory infection called COVID-19 and pneumonia (Mayo Clinic, 2018)
Monocytes	4.4-12.0	12.3 high	N/A	Client's monocytes are elevated in response to COVID-19 and pneumonia respiratory infection

				(Pietrangelo, 2019).
Eosinophils	0.0-6.3	N/A	N/A	
Bands	0.0-5.0	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	140	143	
K+	3.5-5.1	3.7	3.6	
Cl-	98-107	106	103	
CO2	21-31	23	30	
Glucose	74-109	90	136 high	Client's glucose is increased because client is on steroids which is indicative of raising blood glucose (Hoskins, 2020)
BUN	7-25	43 high	34 high	Client's BUN levels are increased which means the client kidneys are not functioning properly. The client has CKD which indicates the client's struggling with kidney failure (MedlinePlus, 2019).
Creatinine	.70-1.30	2.00 high	1.07	Client's creatinine is elevated because client has CKD (Mayo Clinic, 2018).
Albumin	3.5-5.2	3.5	3.6	
Calcium	8.6-10.3	8.0 low	8.0 low	client's calcium is low due to client having decreased kidney function and taking steroids. Client may also have decreased nutrition causing low calcium (Kauhn, 2018).
Mag	1.6-2.4	N/A	N/A	

Phosphate	3.0-4.5	N/A	N/A	
Bilirubin	0.3-1.0	1.0	0.9	
Alk Phos	34-104	8.9	84	
AST	13-39	27	38	
ALT	7-52	22	32	
Amylase	30-222	N/A	N/A	
Lipase	11-82	N/A	N/A	
Lactic Acid	0.5-2.0	N/A	1.6	
Troponin	0.0-6.30	N/A	0.03	
CK-MB	0.60-6.30	N/A	1.07	
Total CK	30-223	N/A	47	

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	N/A	N/A	
PT	11.9-15.0	N/A	N/A	
PTT	22.6-35.3	N/A	N/A	
D-Dimer	0.00-0.62	N/A	10.98 high	Because client has been bedrest and has not been moving as normally would meaning blood coagulation could be altered (MayoClinic, 2017).
BNP	0-100	N/A	N/A	
HDL	>55	N/A	N/A	
LDL	<130	N/A	N/A	
Cholesterol	<200	N/A	N/A	
Triglycerides	35-135	N/A	N/A	

Hgb A1c	4-5.9	N/A	N/A	
TSH	0.5-5.33	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	Yellow & Clear	N/A	N/A	
pH	5.0-8.0	N/A	N/A	
Specific Gravity	1.005-1.034	N/A	N/A	
Glucose	Negative	N/A	N/A	
Protein	Negative	N/A	N/A	
Ketones	Negative	N/A	N/A	
WBC	<5	N/A	N/A	
RBC	0-4	N/A	N/A	
Leukoesterase	Negative	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	7.41	N/A	

PaO2	80.0-90.0	34.7 low	N/A	Because of COVID and Pneumonia the client is not able to properly oxygen blood through the lungs which causes a decreased PaO2 (Gossman et al., 2019).
PaCO2	35.0-45.0	38.4 high	N/A	Client has increased PaCO2 due to client has pneumonia COVID-19 and too much carbon monoxide was in her body which means she was not expelling it properly due to client being unable to oxygenate properly (Leader, 2016).
HCO3	22-26	23.4	N/A	
SaO2	95-98	62.0	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	
Blood Culture	Negative	Negative	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	

Lab Correlations Reference (APA):

BUN (Blood Urea Nitrogen): MedlinePlus Lab Test Information. (2019). Medlineplus.gov. <https://medlineplus.gov/lab-tests/bun-blood-urea-nitrogen/>

DDITT - Clinical: D-Dimer, Plasma. (2017). Wwww.mayocliniclabs.com. <https://www.mayocliniclabs.com/test-catalog/Clinical+and+Interpretive/40936>

Gossman, W., Faysal Alghoula, & Ilya Berim. (2019, July 11). Anoxia (Hypoxic Hypoxia). Nih.gov; StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK482316/>

Hoskins, M. (2020, September 8). Yes, Steroids Can Spike Blood Sugars, So Beware. Healthline. <https://www.healthline.com/diabetesmine/steroids-spike-blood-sugars>

Kahn, A. (2018). Hypocalcemia: Causes, Symptoms, and Treatment. Healthline. <https://www.healthline.com/health/calcium-deficiency-disease>

Leader, D. (2016, May 6). What Is Partial Pressure of Carbon Dioxide? Verywell Health; Verywell Health. <https://www.verywellhealth.com/partial-pressure-of-carbon-dioxide-pac02-914919>

Lymphocytosis: high lymphocyte count Causes. (2018). Mayo Clinic; <https://www.mayoclinic.org/symptoms/lymphocytosis/basics/causes/sym-20050660>

Mayo Clinic. (2018). Creatinine test - Mayo Clinic. Mayoclinic.org; <https://www.mayoclinic.org/tests-procedures/creatinine-test/about/pac-20384646>

Pietrangelo, A. (2019). Monocytes high: what does it mean if monocytes are elevated? Healthline. www.healthline.com/health/monocytes-high#:~:text=When%20your%20monocyte%20level%20is.

Sarah Bush Lincoln Health Center (2020). Reference range (lab values). Mattoon, IL.

Yates, A. (2020). 8 Things That Elevate Your Platelet Count. Verywell Health. <https://www.verywellhealth.com/things-that-elevate-your-platelet-count-401336>

Diagnostic Imaging

All Other Diagnostic Tests (5 points): & Diagnostic Test Correlation (5 points):

EKG: a 12-lead EKG was conducted on the client per Dr. Novak's order due to client having an Altered Mental status on 09/02/21. An EKG is done in correlation to this clients issue because the client came in with altered mental status. Mayo Clinic states that if chest pain, or change in mental status occurs, a 12-lead EKG is always a safe measure to check off the list to ensure there is nothing extremely alarming (Mayo Clinic, 2019). This client's 12-lead on admission showed sinus tachycardia.

Chest X-ray: Client was brought in to the ED on 9/2 being very hypoxic, AMS, and was known positive for COVID. Client was given a CT to ensure there was no brain damage causing AMS. NCBI states that CT is a routine test given to patient's who present with AMS because the client may have a brain bleed or abnormality that only the CT scan can see (Shin et al., 2018). This client's CT scan showed new airspace opacities bilaterally consistent with bronchitis/pneumonia. The CT of the client's head showed no acute intracranial abnormalities.

CT Angiogram Chest Pulmonary with IV Contrast: On 9/02 client received CT angiogram because the client's was hypoxic and not receiving much oxygen. Angiograms are used to see the arteries with the contrast dye (Holm, 2017). This client had a chest pulmonary because the client was not breathing well and they needed to see the pressure of the blood vessels that are responsible for carrying blood to the client's heart (Holm, 2017). This test helps to diagnosis possible blockages such as a blood clot (Holm, 2017). CT angiogram showed no evidence of pulmonary embolism moderate to severe emphysematous lung changes with patchy peripheral

opacities. The lung bases are most pronounced at the right lower lobe and maybe related to local edema/pneumonia.

Chest X-ray: Client received another chest X-ray on 9/5 because the client received an NG feeding tube. NCBI and hospital protocols state that after any NG tube placing, the X-ray is used to ensure the tube is in the correct place before using the tube (Yasin et al., 2020). The results for this test showed the placement was normal.

Chest X-ray: Client received another chest X-ray on 9/7 because client was placed in an ET tube. According to NCBI the X-ray's are used to ensure the placements are in tact (Yasin et al., 2020). The results for this client's x-ray shows the ET tube placed 4cm above carina. NCBI wants the normal to be around 2cm but will accept 4cm above carina to ensure adequate breathing techniques. (Varshney et al., 2016).

Diagnostic Test Reference (APA):

Holm, G. (2017, July 23). *Pulmonary Angiography: Purpose, Procedure & Risks*. Healthline.

<https://www.healthline.com/health/pulmonary-angiography>

Mayo Clinic. (2019). *Electrocardiogram (ECG or EKG) - Mayo Clinic*. MayoClinic.org;

<https://www.mayoclinic.org/tests-procedures/ekg/about/pac-20384983>

Shin, S., Lee, H. J., Shin, J., & Lee, S. (2018). Predictors of abnormal brain computed tomography findings in patients with acute altered mental status in the emergency department. *Clinical and Experimental Emergency Medicine*, 5(1), 1–6.

<https://doi.org/10.15441/ceem.16.163>

Varshney, M., Kumar, R., Sharma, K., & Varshney, P. (2011). Appropriate depth of placement of oral endotracheal tube and its possible determinants in Indian adult patients. *Indian Journal of Anaesthesia*, 55(5), 488. <https://doi.org/10.4103/0019-5049.89880>

Yasin, J. T., Schuchardt, P. A., Atkins, N., Koch, D., Davis, R. M., Saboo, S. S., & Bhat, A. P. (2020). CT-guided gastrostomy tube placement—a single center case series. *Diagnostic and Interventional Radiology*. <https://doi.org/10.5152/dir.2020.19471>

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

Home Medications (5 required)

Brand/Generic	Lisinopril/ Prinivil	Amlodipine besylate/ Norvasc	Dicyclomine hydrochloride/ Bentyl	Pantoprazole/ Protonix	Alprazolam/ Xanax
Dose	10 mg	10 mg	20 mg	20 mg	1 mg
Frequency	BID	HS	QID	Daily and PRN	BID and PRN
Route	PO	PO	PO	PO	PO
Classification	Antihypertensive	Antihypertensive	Antispasmodic	Antiulcer	Antipanic
Mechanism of Action	Reduce blood pressure by inhibiting conversion of angiotensin I to angiotensin II. Angiotensin I is a potent vasoconstrictor that also stimulates adrenal cortex to secrete aldosterone. May also	Binds to dihydropyridine and non dihydropyridine cell membrane receptors site on myocardial and vascular smooth-muscle cells and inhibits influx of extracellular calcium ions across slow calcium channels.	Inhibits acetylcholine's muscarinic actions at postganglionic parasympathetic receptors in CNS, secretory glands, and smooth muscles. These actions relax smooth muscles and diminish and	The final step in the gastric acid production. Protonix binds to the H ⁺ /K ⁺ ATP pump to inhibit gastric acid and basal acid secretion. This binding prevents acid secretion for up to 24 hrs or longer.	May increase affects of GABA and other inhibitory neurotransmitters by binding to specific benzodiazepine receptor in cortical and limbic area of the CNS, GABA

	reduce sodium because of the reduces aldosterone resulting in low blood pressure.	This decreased intracellular calcium level inhibiting smooth muscle cell contractions and relaxing coronary and vascular resistance also decreased myocardial workload.	biliary, GI, and GU tract secretions .		inhibits excitatory stimulation which helps control emotional behavior .
Reason Client Taking	Client has HTN	Client has HTN	Client has IBS	Client has GERD	Client has anxiety and depression
Contraindications (2)	Concurrent use in patients with diabetes or patients with renal impairment; heredity or idiopathic angioedema	Hypersensitivity to amlodipine or its components (Only has one contraindication)	GI obstruction; myasthenia gravis	Concurrent therapy with rilpivirine-containing products; substituted benzimidazoles	Acute angle-closure glaucoma; hypersensitivity to alprazolam
Side Effects/Adverse Reactions (2)	Acute renal failure, hepatic	Arrhythmias, hypotension	Heatstroke, constipation,	Hepatic failure; angioedema	Hepatic failure; blurred vision

	necrosis				
Nursing Considerations (2)	Should not be given to patients who are hemodynamically unstable after an acute MI; use cautiously in patients who struggle with fluid volume deficient	Use cautiously in patients with heart block, heart failure, impaired renal function, and hepatic disorder; Monitor blood pressure closely in patients who have heart failure because it can cause symptomatic hypotension.	Assess patient for tachycardia before giving dicyclomine; heart rate may increase; don't give drug by I.V. route because major adverse reactions may occur.	Flush IV line with DW5 normal saline solution, or lactated ringer's injection before and after giving drug; When giving IV over 2 minutes reconstitute with 10ml of normal saline injection.	Expect to give higher dose if patient's panic attacks occur unexpectedly or during such activities as driving; plan to reduce dosage slowly when alprazolam is discontinued as ordered because use can lead to dependency
Key Nursing Assessment(s) Prior to Administration	Monitor blood pressure closely as it can cause hypotension if not used correctly; monitor for fluid volume	Ensure client does not have heart failure before administration of the drug; Ensure client does not have hypotensi	Assess heart rate and heart sounds; assess EKG	Monitor for diarrhea; assess for urine voiding to ensure voiding after administration is normal	Monitor for drowsiness; monitor for possible drug interactions that could be fatal for the client

	deficit because it can cause dehydration	on before administration because this may drop the client's blood pressure too low from that point.			
Client Teaching needs (2)	Explain that this helps control but does not cure HTN and the patient may need lifelong therapy; take at the same time every day	Take missed doses as soon as possible in the next 24 hours; suggest taking amlodipine with food to reduce GI upset.	Inform patient that dicyclomine relieves symptoms but doesn't cure the disorder; instruct patient to take drug 30-60 minutes before eating.	Advise patient who takes warfarin to follow bleeding precautions; Advise patient to notify all prescribers of them taking protonix	Warn against stopping drug abruptly because withdrawal symptoms may occur; tell patient never to increase prescribe dose because of risk of dependency

Hospital Medications (5 required)

Brand/Generic	Dexamethasone/	Fentanyl/abstral	Norepinephrine/	Propofol/diprivan	Baricitinib/
----------------------	-----------------------	-------------------------	------------------------	--------------------------	---------------------

	Dexamethasone intensol		levoped		Olumiant
Dose	1.5 mL	1,250 mcg (Titrated per protocol)	250 mL (Titrated per protocol)	1,000 mg (Titrated per protocol)	2mg
Frequency	Daily	IV Continuous Infusion	IV Continuous Infusion	IV Continuous Infusion	Daily
Route	IV Push	IV	IV	IV	PO
Classification	Anti-inflammatory, immunosuppressant/ Glucocorticoid	Opioid analgesic	Vasopressor	Sedative-hypnotic	Antirheumatic
Mechanism of Action	Binds to intracellular glucocorticoid receptors and suppresses inflammatory and immune responses by inhibiting monocyte and neutrophil accumulation at inflammation site	Binds to opioid receptor sites in the CNS, altering perception of and emotional response to pain by inhibiting ascending pain pathways. Fentanyl may alter neurotransmitter release from afferent	At more than 4mcg/min inhibits adenylyl cyclase and directly stimulates adrenergic receptors, which inhibits cAMP production. Inhibition of cAMP production constricts	Decreases cerebral blood flow, cerebral, metabolic oxygen consumption, and intracranial pressure and increases cerebrovascular resistance, which may play a role in propofol's hypnotic effects	Janus Kinases are intracellular enzyme that influence cellular processes of hemostasis and immune cell function. Janus kinase inhibitors interfere with

	and suppressing bacterial and phagocytic action.	nerves responsive to painful stimuli and it causes respiratory depression by acting directly on respiratory centers in the brain stem	arteries and veins and increases peripheral vascular thrombosis		these actions, thereby reducing the signs and symptoms of rheumatoid arthritis, which is thought to be an autoimmune disorder.
Reason Client Taking	Steroid to help treat COVID-19 and pneumonia	To control pain	To control acute hypotensive blood pressure	To provide sedation for the critically ill patients	New drug doctors are using to help treat COVID-19
Contraindications (2)	Administration of live-virus vaccine to patient or family member; idiopathic thrombocytopenic purpura	Hypersensitivity to fentanyl, alfentanil, sufentanil or their components; opioid intolerance	Hypovolemia, hypersensitivity to norepinephrine	Hypersensitivity to propofol or its components to eggs or egg products; hypersensitivity to soybeans or soy products	Hypersensitivity to baricitinib or its components
Side Effects/Adverse Reactions (2)	ICP; myocardial rupture	Seizures; apnea	Bradycardia, metabolic acidosis	Bradycardia; hypotension	Pulmonary embolism; Thrombo

					sis
Nursing Considerations (2)	Give oral drug with food to decrease GI distress; Shake IM solution before injecting deep into large muscle mass	Expect the blood fentanyl level to be prolonged if patient chews or swallows the transmucosal form because drug is absorbed slowly from GI tract; be aware that 100 mcg of fentanyl is equivalent in potency to 10 mg of morphine	Make sure solution contains no particles and isn't discolored before administering; give drug with a flow-control device	Expect patient to recover from sedation within 8 minutes; Dosage must be tapered before stopping therapy.	Monitor patients lipid profile periodically as ordered during this drugs therapy. This profile should be completed every 12 weeks.; Avoid giving patient live vaccines during baricitinib because drug may reduce effectiveness of the vaccination.
Key Nursing Assessment(s) Prior to Administration	Monitor glucose closely, monitor for tarry stools	Monitor respirations before administration to ensure respiration	Monitor blood pressure and monitor apical pulse to	Monitor for cardiac disease before administering because	Get a fresh set of hemoglobin labs before administ

		s won't decrease too much.; Monitor possible drug interactions between this med and other medications before giving it.	ensure apical pulse is not abnormal	this could aggravate that disease.; Monitor client for peripheral vascular disease before administration because it could worsen peripheral vascular disease	ration because this drug can alter the values.; Monitor clients lipid levels before administration because this drug can alter levels.
Client Teaching needs (2)	Instruct patient not to stop drug abruptly; Urge patient to notify prescriber about illness, surgery, or changes in the stress level	For transmucosal form, inform diabetic patient that each unit contains 2g of sugar.; Caution patient to avoid hazardous activities until drugs CNS effects are known.	Urge patient to immediately report burning, leaking, or tingling around I.V. site; Urge patient to look for blanching and to alert nurse if there is.	Urge patient and family to voice concerns and ask questions before administration.; reassure patient that she'll be monitored closely during administration and that vital functions will be supported as needed.	Tell patients to take the drug exactly as prescribed.; Tell patients not to receive vaccinations during this drug therapy.

Medications Reference (APA):

Jones & Bartlett Learning. (2020). *2020 Nurse's drug handbook (19th ed.)*. Jones & Bartlett Publishers.

Assessment

Physical Exam (18 points)

<p>GENERAL (1 point): Alertness: Not able to assess due to orientation and sedation Orientation: Not able to assess due to orientation and sedation Distress: Client not in distress as indicated by FLACC scale. Overall appearance: Well-kept for condition.</p>	<p>Client is a well-kept 54-year-old Baptist female who is on intubation and sedation to maintain oxygenation levels. Alertness and Orientation were not able to be assessed. A FLACC assessment was conducted to ensure client was not in distress and the results came back negative. Client was not facial grimacing or having muscle movements that were indicative of distress. Client's overall appearance was well kept. Client's hair was braided and no drainage coming from client's mouth or nose. Client looked great.</p>
<p>INTEGUMENTARY (2 points): Skin color: Normal for race/White Character: Warm, Dry, and intact. Not frail. Temperature: Warm Turgor: Elastic Rashes: none Bruises: None Wounds: None Braden Score: 12 Drains present: Y <input type="checkbox"/> N <input type="checkbox"/> NONE PRESENT Type:</p>	<p>Braden Score: 12 Client's skin color is white/normal for race. Client's skin is warm, dry, and intact. There we no signs of bruises, rashes, or wounds on the client's body. Client has an elastic skin turgor with no drains present. Client does struggle with repositioning, so the nursing team needs to be sure the client is getting positioned correctly with boney prominences being cushioned.</p>
<p>HEENT (1 point): Head/Neck: Trachea is midline, oral mucosa is moist and intact. Head is symmetrical and normocephalic. Client's tongue is pink and moist with no cracks or abnormalities. Ears: Tympanic membranes are noted pearly silver and no abnormal drainage</p>	<p>This clients head is normocephalic. Trachea is midline and oral mucosa is pink, moist, and intact. Head and neck are symmetrical. Ears, eyes, and nose are all symmetrical. Client's TM is noted pearly silver bilaterally with no abnormal drainage. PERRLA is noted with sclera appearing white bilaterally with no conjunctival inflammation or</p>

<p>was noted bilaterally. Both ears are symmetrical with no abnormalities with the formation of the ears.</p> <p>Eyes: PERRLA, Client's sclera is white and there are no signs of jaundice. There are no conjunctival inflammation or abnormal drainage from the eyes. Client's eye are symmetrical bilaterally.</p> <p>Nose: Septum is midline. No abnormal drainage noted. No Epistaxis.</p> <p>Teeth: Client does not have teeth. Client did not have dentures bedside. Oral mucosa is pink, moist, and intact.</p>	<p>drainage bilaterally. Nasal septum is midline and no epistaxis noted. Client does not have teeth but oral mucosa is pink, moist and intact. Client is intubated so uvula positioning was not able to be assessed.</p>
<p>CARDIOVASCULAR (2 points):</p> <p>Heart sounds: S1 and S2 were auscultated.</p> <p>S1, S2, S3, S4, murmur etc.</p> <p>Cardiac rhythm (if applicable): Sinus Tachycardia</p> <p>Peripheral Pulses: +3 bilaterally for radial pulses and +3 bilaterally for pedal pulses.</p> <p>Capillary refill: <3 seconds</p> <p>Neck Vein Distention: Y <input type="checkbox"/> N <input type="checkbox"/></p> <p>NONE Edema Y <input type="checkbox"/> N <input type="checkbox"/> NONE</p> <p>Location of Edema:</p>	<p>Clients heart sounds were auscultated and S1 and S2 were noted. The client is noted to have sinus tachycardia. Peripheral pulses were measured at 3+ bilaterally for both radial and pedal pulses bilaterally. Client had a less than three second capillary refill with no neck vein distention or edema located. Clients heart rate varied throughout the clinical stay. Client was becoming very hypotensive causing client's heart rate to become tachycardic. Client's condition improved when laying client flat.</p>
<p>RESPIRATORY (2 points):</p> <p>Accessory muscle use: Y <input type="checkbox"/> N <input type="checkbox"/></p> <p>NONE</p> <p>Breath Sounds: Location, character</p> <p>ET Tube:</p> <p>Size of tube: 7.5</p> <p>Placement (cm to lip): 22 at the lip</p> <p>Respiration rate: set at 26 and client's respirations at 30</p> <p>FiO2: 100%</p> <p>Total volume (TV): 320</p> <p>PEEP: 16</p> <p>VAP prevention measures:</p>	<p>Client was on a ventilator that was helping the client to breath and stay oxygenated. Client was breathing at 30 breaths per minute with the ventilator set at 26 breaths per minute. Client's respirations were even bilaterally with equal rise and fall. Upon auscultation of client's lungs, client showed clear lung sounds bilaterally in all lobes. Client is currently on an ET tube size 7.5 and 22 at the lip with fiO2 being set at 100%, total volume set at 320 and a PEEP of 16. To reduce the likelihood of a client getting VAP, it is vital that nurses and care takers of the client follow strict protocol. This means the nurses should follow excellent oral care and suctioning for the client (Boltey et al., 2017). Client's who are ventilated are at high risk</p>

	<p>for increased bacteria because of possible damage to the oral mucosa (Boltey et al., 2017). Client's are also at risk for increased bacteria because the oral mucosa becomes dry (Boltey et al., 2017). The clients should also receive suctioning to aid in prevention of increased bacteria (Boltey et al., 2017). The client should receive oral care and suctioning every 2 hours and PRN (Boltey et al., 2017). Client's HOB should also be elevated 30-45 degrees to reduce chances of aspiration on secretions.</p>
<p>GASTROINTESTINAL (2 points): Diet at home: Regular (As desired) Current Diet: Jevity 2 NG feedings Height: 165.5 cm Weight: 82.2 kg Auscultation Bowel sounds: Present and active bowel sounds in all four quadrants. Last BM: 9/4/21 Palpation: Pain, Mass etc.: Client does not show signs of pain with palpation. Client cannot speak due to intubation and sedation. There were no masses noted. The abdomen is soft and non-tender. Inspection: Distention: None Incisions: None Scars: None Drains: None Wounds: None Ostomy: Y <input type="checkbox"/> N <input type="checkbox"/> NONE Nasogastric: Y <input type="checkbox"/> N <input type="checkbox"/> YES NG Size: 14 French Feeding tubes/PEG tube Y <input type="checkbox"/> N <input type="checkbox"/> NONE Type:</p>	<p>Client is on regular as desired at home, however since admission to the hospital the client is on Jevity 2 NG tube feedings. Client's bowel sounds are present in all four quadrants. The client's last bowel was on 9/4/21. The client did not show signs of pain with palpation of abdomen. There were no masses felt on palpation. The client's abdomen is soft and non-tender. The client does not have abdominal distention, wounds, or incisions, or scars. Client has an NG tube and does not have a feeding tube or PEG tube.</p>
<p>GENITOURINARY (2 Points): Color: Yellow/clear Character: Clear Quantity of urine: Client did not urinate during clinical hours. Pain with urination: Y <input type="checkbox"/> N <input type="checkbox"/> NONE</p>	<p>The client did not urinate for me during the time of clinical hours. There was a small amount of urine left in the suction container that I was able to do a small inspection of. The urine was yellow and clear. The client currently has a Purewick external catheter</p>

<p>Dialysis: Y <input type="checkbox"/> N <input type="checkbox"/> NONE</p> <p>Inspection of genitals: Clients female genitals were normal and no abnormalities noted.</p> <p>Catheter: Y <input type="checkbox"/> N <input type="checkbox"/> NONE</p> <p>Type: Purewick</p> <p>Size: N/A</p> <p>CAUTI prevention measures:</p>	<p>placed to collect the urine. There is no size indication on Purewick. Some CAUTI prevention measures include using strict sterile technique when inserting the catheter, securing the catheter to prevent movement, and performing daily perineal care (Hinkle & Cheever, 2018). It is also vital that caretakers maintain a closed system and frequently inspect urine color, order, and consistency (Hinkle & Cheever, 2018).</p>
<p>MUSCULOSKELETAL (2 points):</p> <p>Neurovascular status: Radial pulse is 3+ bilaterally and pedal pulse is 3+ bilaterally. Skin is warm and intact bilaterally in upper and lower extremities. Clients senses are intact and skin is pink and normal for race. Not cyanotic.</p> <p>ROM: Client demonstrates functional passive range of motion. Client is on sedation and under intubation so I am not able to assess the active ROM</p> <p>Supportive devices: None</p> <p>Strength: Not able to assess due to intubation and sedation</p> <p>ADL Assistance: Y <input type="checkbox"/> N <input type="checkbox"/> YES</p> <p>Fall Risk: Y <input type="checkbox"/> N <input type="checkbox"/> YES</p> <p>Fall Score: 50</p> <p>Activity/Mobility Status: Client needs assistant with ADL due to sedation and intubation. Client's mobility is limited</p> <p>Independent (up ad lib) NO</p> <p>Needs assistance with equipment YES</p> <p>Needs support to stand and walk Client is under sedation and intubation and is not able to stand or walk. Mobility and limited.</p>	<p>Fall Score: 50</p> <p>This client has 3+ radial pulses and pedal pulses bilaterally. Skin in clean, dry, warm, and intact. Client's senses are intact and skin is white/normal for race and not cyanotic. Client is on a vent and is sedated and intubated. The client has limited mobility and is a fall risk. Client needs assistance with all ADLs. Client is not stable.</p>
<p>NEUROLOGICAL (2 points):</p> <p>MAEW: Y <input type="checkbox"/> N <input type="checkbox"/> NONE</p> <p>PERLA: Y <input type="checkbox"/> N <input type="checkbox"/> YES</p> <p>Strength Equal: Y <input type="checkbox"/> N <input type="checkbox"/> if no -</p> <p>Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> N/A Not able to assess</p> <p>Orientation: Unable to assess due to intubation and sedation</p>	<p>Client's neurological level is altered because the doctor has the client intubated and sedated. The client is at a -4 RASS. The client neurological level was not able to be assessed due to intubation and sedation.</p>

Mental Status: Unable to assess due to sedation and intubation Speech: Unable to assess due to intubation and sedation Sensory: Intact LOC: Unable to assess due to intubation and sedation	
PSYCHOSOCIAL/CULTURAL (2 points): Coping method(s): Developmental level: Religion & what it means to pt.: Personal/Family Data (Think about home environment, family structure, and available family support):	Psychosocial/Cultural assessment was not able to be assessed due to client being intubated and sedated. There was not family at bedside. Client's record shows the client is a Baptist.

References for Physical Exam:

Boltey, E., Yakusheva, O., & Costa, D. K. (2017). 5 Nursing strategies to prevent ventilator-associated pneumonia. *American Nurse Today*, 12(6), 42–43. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5706660/>

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
10:59	114	86/54	30	36 C	85%
1:00	96	102/74	30	36 C	92%

Vital Sign Trends/Correlation:

This client's vital signs during my clinical stay were not great. At 1059 the client was slightly tachycardic and hypotensive. Previous to vital sign check the client had an internal intrajugular central vein IV placed as well as an in arterial line placed in the client's right wrist. The client's vital signs were stable before placing the lines however between 20 to 30 minutes after the client's blood pressure and heart rate began to deteriorate. With the hypotension and tachycardia,

this nursing student and her instructor decided to increase the vasopressors and reposition the client to a flat position to facilitate better blood pressure. After those changes, the client's blood pressure and heart rate returned to normal limits. The client's respirations were around 30 the entire stay. The client's ventilator was set at 26 however the patient was breathing 30 breaths per minute consistently. Client's temperature was stable the entire stay. The client's oxygen varied throughout the stay, with a low of 85% at 1059. Client's oxygen also improved after repositioning and vasopressors. This client's vital signs match her diagnosis.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
10:30am	FLACC	Unable to assess due to incubation and sedation	0/10	Unable to assess due to incubation and sedation	Unable to assess due to incubation and sedation. Client is on Fentanyl drip to manage pain.
1:00pm	FLACC	Unable to assess due to incubation and sedation	0/10	Unable to assess due to incubation and sedation	Unable to assess due to incubation and sedation. Client is on Fentanyl drip to manage pain.

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: 20 G X2 Location of IV: Left AC and left hand Date on IV: 09/07/21	This client has 2 20 G IV in left side. There is one in her left AC that was placed on the 7th of September. There is

<p>Patency of IV: Patent Signs of erythema, drainage, etc.: none IV dressing assessment: Clean, dry, and intact</p>	<p>another 20 G placed in the left hand of the client that was also placed on the 7th of September. Both are being used to run medications through. When assessing the IV's, there were no signs of erythema, drainage or redness noted. The IV are patent and are clean, dry, and intact.</p>
<p>Other Lines (PICC, Port, central line, etc.)</p>	
<p>Type: Central line placed intrajugular Size: N/A Location: Intrajugular Date of insertion: 09/07/21 Patency: Patent Signs of erythema, drainage, etc.: None Dressing assessment: Clean, dry, and intact Date on dressing: 09/07/21 CUROS caps in place: Y <input type="checkbox"/> N <input type="checkbox"/> YES CLABSI prevention measures:</p>	<p>Upon getting to the clinical site, this nursing student walked in on the client having a central intrajugular line placed on her right side. There is no size on the central lines. The line is newly placed and is patent with no signs of erythema drainage, or abnormalities. The IV is clean, dry, and intact. The three-lumen central line has all three CURO caps placed. Before leaving the clinical site, the client had an arterial line placed in her right wrist to get a better blood pressure reading. The arterial line was place on 09/07/21 with the IV being patent, clean, try, and intact. Some CLABSI prevention methods include ensuring maximal sterile technique during the insertion period, use chlorhexidine skin antiseptics, ensure daily review of the line and use CURO caps and alcohol swabs with each use of the line (Hinkle & Cheever, 2018).</p>

Hinkle, J.L., and Cheever, K.H. (2018). *Brunner & Suddarth's textbook of medical-surgical nursing*. Lippincott Williams & Wilkins.

Intake and Output (2 points)

<p>Intake (in mL) – List what type of intake and how much</p>	<p>Output (in mL) – List what type of output and how much</p>
--	--

NG tube- 30ml/hr = 180ml 60 CC tap water= 60ml 20 CC flush= 20ml 1.5 cc flush= 1.5ml Fentanyl 40 cc/hr= 240ml Norepinephrine 33 cc/hr= 198ml Propofol 27.1 cc/hr= 162.6 ml TOTAL= 862.1ml	NG tube residual withdraw= 275 ml TOTAL= 275 ml *client did not urinate while on my shift*
--	--

Nursing Care

Summary of Care (2 points)

Overview of care: Throughout this clinical stay this nursing student did a full assessment on her client. This nursing student performed oral care and suctioning on the client to help prevent VAP. This nursing student assisted the doctor with the insertion of an arterial line and a central line. This nursing student and instructor gave medication and checked the client's residual in the client's feedings tube. This nursing student and instructor increased vasopressors on the client because the client was rapidly decreasing.

Procedures/testing done: Arterial line placed in right wrist for better blood pressure reading, and intrajugular central line placement

Complaints/Issues: Client was not able to verbalize any complaints or issues due to being sedated and intubated. Client's blood pressure began to drop during our stay, however preventative measures were taken. The doctor is not sure what exactly caused the hypotension and tachycardia; however, it could be from the stress of. The repositioning and line placements.

Vital signs (stable/unstable): Client's vital signs varied throughout the clinical stay. The clients' vitals after the placements of the central line and arterial line were abnormal but with

preventative measures taking the place the clients condition bettered. Client is varying between 88%-95% oxygenation and between tachycardic and normal rhythm. Currently the client is unstable.

Tolerating diet, activity, etc.: Client is currently intubated and sedated causing the activity to be decreased. The client's diet is also decreased for what could be from numerous amounts of things. The client is being fed jevity 2 and has a 275 residual.

Physician notifications: There were no knew physician notifications while on my shift.

Future plans for patient: The future plan for this client include is to try to slowly titrate down the ventilator and medications to improve quality of the client's life. Long term plans for the client include getting passed the virus and pneumonia to achieve normal everyday activities.

Discharge Planning (2 points)

Discharge location: Home with family or to a long-term care facility

Home health needs (if applicable): N/A

Equipment needs (if applicable): N/A (Possibly ventilator depending on the client's condition 21 days from admission)

Follow up plan: Follow with primary care provider and possible PT/OT to gain muscle strength back after being bedrest for so long.

Education needs: COVID-19 prevention measures, COVID-10 vaccination information, pneumonia prevention measures, education on how to regain lost muscle rigidity, how to administer medications or insensitive spirometers depending on the discharge plan.

Nursing Diagnosis (15 points)

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

Nursing Diagnosis <ul style="list-style-type: none"> • Include full nursing diagnosis with “related to” and “as evidenced by” components 	Rational <ul style="list-style-type: none"> • Explain why the nursing diagnosis was chosen 	Intervention (2 per dx)	Evaluation <ul style="list-style-type: none"> • How did the patient/family respond to the nurse’s actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective airway clearance related to COVID-19 pneumonia as evidenced by large secretions being suctioned from client	This nursing diagnosis was chosen because the client was brought in with a 44% RA oxygen and large secretions were being suctioned from her airway. Client could not clear her airway in order to oxygenate.	1. Suctioning client every two hours and as needed 2. Provide adequate hydration to thin and loosen secretions	The client responded well to suctioning and adequate hydration according to the client’s vitals. The client is sedated and ventilated, however with suctioning and adequate hydration the stats increased showing interventions are working. Client is not able to express her feelings due to sedation and intubation. Family is not bedside. Client’s goal is to maintain stable vital signs and with suctioning and hydration the client’s

			vital signs improve. The outcome would be that the clients airway is clear enough to breathe.	
2.	Impaired gas exchange related to client's altered delivery of oxygen as evidenced by client's dyspnea.	This nursing diagnosis was chosen because the client was brought in with 44% RA and client was struggling to breath.	<p>1. Position HOB in semi-fowlers to promote optimal lung expansion (Wayne, 2017).</p> <p>2. Consider placing the client on ventilation if client is not able to maintain breathing requirements (Wayne, 2017).. (this client was not able to maintain breathing requirements or gas exchange causing her to go on a vent).</p>	Family was not bedside but did give us the right to go through all measures to help this client. Client was not able to verbalize concerns due to being sedated and intubated. Client's goal is to exchange gas oxygen without assistance, however the client is struggling to maintain the stats with the help of the ventilator. The client's outcome would be to take the client off of the vent and the client would be able to exchange oxygen and gas independently.
3.	Impaired breathing pattern related to client's dyspnea as evidenced by client's ventilator.	This nursing diagnosis was diagnosed because the client cannot breath effectively because of COVID-19 and pneumonia.	<p>1. Maintain a clear airway by suctioning the client (Wayne, 2019).</p> <p>2. Give the client periods of rest and try not to overload the patient with too much activities</p>	Client is intubated and sedated. Client's family is not bedside to express how they feel. Client's goal is to breath effectively on her own in normal 12-20 limits. Currently client is breathing 30 BPM. The outcome is for this client to breathe within normal limits and not need the ventilator.

		because it is vital the client reserves her energy used to breathe (Wayne, 2019).	
4. Reduced gastrointestinal mobility related to NG tube feedings as evidenced by client's 275ml residual.	This nursing diagnosis was chosen because the client is receiving tube feedings and had a residual of 275ml.	<ol style="list-style-type: none"> 1. Check residuals every feeding to ensure absorption 2. slow feeding regimens to give the client time to absorb the needed nutrients 	Client is intubated and sedated and family is not bedside. Client's goal is to maintain ordered feeding regimens. The outcome now is that the client has a 275 mL residual and is not maintaining it. This nursing student and instructor dropped it down to 30ml/hr to give the client more time to absorb the food.
5. Impaired skin integrity related to client on bedrest as evidenced by small blanchable pressure sores on client's elbow.	This nursing diagnosis was chosen because the client has been in the hospital since the second of September and with the client being on bedrest that puts the client at risk for pressure sores.	<ol style="list-style-type: none"> 1.. Reposition the client every 2 hours 2. Provide pillows to pad the boney prominences to ensure no pressure injuries form. 	Client is intubated and sedated. Family is not at bedside. Client's goal is to not have pressure ulcers form during her stay at the hospital. The client's outcome is to be determined but the client's prominent sites are being padded and watched closely.

Other References (APA):

Wayne, G. (2017, September 23). *Impaired Gas Exchange – Nursing Diagnosis & Care Plan*.

Nurseslabs. <https://nurseslabs.com/impaired-gas-exchange/>

Wayne, G. (2019, February 6). *Ineffective Breathing Pattern – Nursing Diagnosis & Care Plan*.

Nurseslabs. <https://nurseslabs.com/ineffective-breathing-pattern/>

Concept Map (20 Points):

Subjective Data

- client's pain tolerance
- client is short of breath

Nursing Diagnosis/Outcomes

Ineffective airway clearance related to COVID-19 pneumonia as evidenced by large secretions being suctioned from client

Client's goal is to maintain stable vital signs and with suctioning and hydration the client's vital signs improve. The outcome would be that the client's airway is clear enough to breathe.

Impaired gas exchange related to client's altered delivery of oxygen as evidenced by client's dyspnea.

Client's goal is to exchange gas oxygen without assistance, however the client is struggling to maintain the status with the help of the ventilator. The client's outcome would be to take the client off of the vent and the client would be able to exchange oxygen and gas independently.

Impaired breathing pattern related to client's dyspnea as evidenced by client's ventilator.

Client's goal is to breathe effectively on her own in normal 12-20 limits. Currently client is breathing 30 BPM. The outcome is for this client to breathe within normal limits and not need the ventilator.

Reduced gastrointestinal mobility related to NG tube feedings as evidenced by client's 275ml residual.

Client's goal is to maintain ordered feeding regimens. The outcome now is that the client has a 275 mL residual and is not maintaining it. This nursing student and instructor dropped it down to 30ml/hr to give the client more time to absorb the food.

Impaired skin integrity related to client on bedrest as evidenced by small blanchable pressure sores on client's elbow.

Client's goal is to not have pressure ulcers form during her stay at the hospital. The client's outcome is to be determined but the client's prominent sites are being padded and watched closely.

Patient Information

-Client is a 54-year-old Baptist female who is admitted to the hospital with COVID-19 pneumonia. Client was brought to the ED after not being able to be contacted for two days. Client had an oxygen saturation of 44% on RA on admission. Client is on a ventilator to maintain oxygen saturation.

Nursing Interventions

1. Suctioning client every two hours and as needed

2. Provide adequate hydration to thin and loosen secretions

1. Position HOB in semi-fowlers to promote optimal lung expansion (Wayne, 2017).

2. Consider placing the client on ventilation if client is not able to maintain breathing requirements (Wayne, 2017).. (this client was not able to maintain breathing requirements or gas exchange causing her to go on a vent). Maintain a clear airway by suctioning the client (Wayne, 2019).

Give the client periods of rest and try not to overload the patient with too much activities because it is vital the client reserves her energy used to breathe (Wayne, 2019).

Check residuals every feeding to ensure absorption

2. slow feeding regimens to give the client time to absorb the needed nutrients
1. Reposition the client every 2 hours

2. Provide pillows to pad the bony prominences to ensure no pressure injuries form.

Objective Data

- Low oxygen level
- hypotensive
- blanchable redness on elbows
- lymphocytes are abnormal