N321 Care Plan #1

Lakeview College of Nursing

Ashley Pascual

Demographics (3 points)

Date of Admission 2/15/22	**Client Initials** G. A.	**Age** 35	**Gender** Female
Race/Ethnicity African American	**Occupation** Nurse	**Marital Status** Not Married	**Allergies** Demerol (meperidine) - Reaction: Worsens pain Fentanyl - Reaction: Headache Morphine - Reaction Hives - Tolerate Dilaudid
Code Status Full Code	**Height** 165.1 cm (5’5”)	**Weight** 142.7 kg (314 lbs)	

Medical History (5 Points)

Past Medical History: Sickle Cell anemia

Past Surgical History: Implant Venous access port placement

Family History: Patient stated “No notable family history”

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

Patient never smoked or vaped. Was a social drinker prior to now, but is currently not using alcohol.

Assistive Devices: None

Living Situation: Lives at home by herself.

Education Level: Bachelor’s degree in Nursing, and is currently in school for Master’s degree.

Admission Assessment

Chief Complaint (2 points): Sickle Cell Anemia Pain

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

Patient has a history of Sickle Cell Anemia. Patient came to the ER for Sickle Cell pain that started a week prior (2/7/22). Patient is used to having "normal" pain in the lower back and legs. Pain increased (2/14/22) moving to the upper back and shoulders. Pain was not controlled at home with dilaudid 4 mg every 4 hour PRN. Patient believes that her pain was triggered by "stress and weather". Patient rates pain at a 7/10. While in the emergency department the patient received Dilaudid IV 2mg, three times and Benadryl to counteract itching. Pain relief was achieved and the patient was discharged to home. Patient returned to the Emergency Department (2/15/22) where she was admitted for pain control.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Sickle Cell Anemia Crisis

Secondary Diagnosis (if applicable): N/A

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

Sickle Cell Anemia is a recessive genetic disease where the ordinarily round erythrocytes are "sickle" or half-moon shaped. Sickle Cell Anemia is caused by two of the same beta-S (βS) alleles. Forty-three million people are carriers of some Sickle Cell Disease, but they may not present any signs or symptoms. Sickle cell anemia in patients results from both parents carrying the recessive gene. Sickle cells cannot carry hemoglobin and therefore can not carry oxygen. This can cause a lower blood oxygen level, and long periods of limited oxygen can cause the patient to be hypoxic. The sickle cells also do not pass through the blood vessels quickly, causing blockages that could lead to MI or stroke (Sundd et al., 2019. Signs and symptoms of sickle cell anemia vary from person to person. Vaso-occlusion is the most common complication of SCA, and this can lead to pain, stroke, acute chest syndrome, and spleen issue. When patients notice intense pain, this usually means they are experiencing a sickle cell crisis. The pain is induced from a lack of oxygen to the body tissue (*Sickle cell symptoms…,* 2021*)*. When labs are drawn in a patient suffering from sickle cell anemia, it is customary to see a decrease in red blood cells, hemoglobin, and hematocrit. This patient (G.A.) has a low red blood cell count, low hemoglobin, and low hematocrit levels.

Patients may also have a lower blood oxygen level but a higher carbon dioxide level. Since oxygen is not being appropriately transferred, gas exchange will decrease. Diagnostic tests in determining if a patient has sickle cell anemia include CBC, genetic/DNA testing, sickling tests, and peripheral blood smears (Arishi et al., 2021). Treatments include analgesics and antimetabolites, which help with the pain involved with this disease. Procedures include stem cell transplant of the bone marrow. Oxygen therapy may be needed during a crisis (*Sickle cell symptoms…,* 2021*)*. The patient currently in the hospital is being treated with opioid analgesics to help control the pain of her current crisis.

Pathophysiology References (2) (APA):

Arishi, W. A., Alhadrami, H. A., & Zourob, M. (2021, May 5). *Techniques for the detection of sickle cell disease: A Review*. Micromachines. Retrieved February 27, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8148117/

Sickle cell symptoms & complications. Spark Sickle Cell Change. (2021). Retrieved February 27, 2022, from https://www.sparksicklecellchange.com/what-is-sickle-cell/symptoms-complications?msclkid=b66ac6cbf8001b2605cba4d10dbb62c5&utm_source=bing&utm_medium=cpc&utm_campaign=Sickle+Cell+Symptoms&utm_term=signs+and+symptoms+of+sickle+cell&utm_content=Symptoms

Sundd, P., Gladwin, M. T., & Novelli, E. M. (2019, January 24). *Pathophysiology of sickle cell disease*. Annual review of pathology. Retrieved February 27, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7053558/

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	4-5.5	3.88	3.39	Patient suffers from sickle cell anemia. Sickle cell anemia contributes to a low RBC because red blood cells are dying faster than normal ones can be created (*Low hemoglobin count causes* 2022).
Hgb	12-15	10.7	9.4	Low Hgb is directly related to low RBC count, without red blood cells there cannot be hemoglobin. Since the patient has anemia her blood cells are already limited (*Low hemoglobin count causes* 2022).
Hct	38.3-48.6	29.4	26.2	Hct and Hgb typically decrease together. Hct labs help determine how efficient the RBC are. A low number

				of RBC, in this case because of sickle cell anemia, means there will be low numbers of Hct (*Low HGB and HCT* 2022).
Platelets	150-400	275	270	
WBC	4.5-11	10.63	8.93	
Neutrophils	2-7.5	2.1%	3.1%	
Lymphocytes	4.5-11.0	33.1%	40%	Chronic diseases tend to affect the body's immune system. The patient having sickle cell anemia means there is an issue in production of blood cells this can include WBC (Ochocinski et al., 2020).
Monocytes	3-13	6.6%	7.1%	
Eosinophils	0.0-0.6	2.6%	6.35	Eosinophils are markers for allergies. The patient has been receiving dilaudid, a morphine derivative. The patient is allergic to morphine and has to take the dilaudid in tandem with diphenhydramine to counteract a reaction. The patient takes dilaudid at home which explains the 2.6% upon admission. The patient has been receiving dilaudid at a more frequent rate in the hospital this may be why there has been an increase during the patients stay (*Eosinophilia: Causes, treatment* 2018).
Bands	NONE	NONE	NONE	

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	137	141	
K+	3.5-5.0	3.7	4.0	

Cl-	97-107	106	107	
CO2	38-41	25	26.0	Severe anemia can cause hyperventilation. Hyperventilation can cause hypocapnia. If the patient while in her sickle cell crisis is overbreathing it can cause a low CO2 level (Respiratory alkalosis 2021).
Glucose	70-100	100	99	
BUN	8-25	14	8	
Creatinine	0.6-1.3	0.8	0.74	
Albumin	3.4-5.4	3.6	3.0	
Calcium	8.6-10.2	9.2	8.7	
Mag	1.3-3.0	1.9	1.6	
Phosphate	2.5-4.5	N/A	N/A	
Bilirubin	0.3-1.0	1.0	N/A	
Alk Phos	44-147	60	58	
AST	10-30	17	58	Increased AST and ALT can be attributed to many factors. Typically it has to do with alcohol consumption, but the patient does not currently consume any alcohol. Other factors could be NSAID use, polypharmacy, and obesity (Holt & Holt, 2020).
ALT	10-40	10	63	
Amylase	30-100	N/A	N/A	
Lipase	0-160	N/A	N/A	

Lactic Acid	0.5-1	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	2-3	N/A	N/A	
PT	9.5-11.3	N/A	N/A	
PTT	30-40	N/A	N/A	
D-Dimer	220-500	N/A	N/A	
BNP	0.5-30	N/A	N/A	
HDL	>60	N/A	N/A	
LDL	<100	N/A	N/A	
Cholesterol	<200	N/A	N/A	
Triglycerides	<150	N/A	N/A	
Hgb A1c	<5.7	N/A	N/A	
TSH	0.4-5	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	4.5-8	N/A	N/A	
Specific Gravity	1.005-1.025	N/A	N/A	

Glucose	NONE	N/A	N/A	
Protein	NONE	N/A	N/A	
Ketones	NONE	N/A	N/A	
WBC	<2.5	N/A	N/A	
RBC	<2	N/A	N/A	
Leukoesterase	Negative/Moderate	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	
Blood Culture	Negative	N/A	N/A	
Sputum Culture	Negative	N/A	N/A	
Stool Culture	Negative	N/A	N/A	
Sickle Cell	0	N/A	5-10 (2/23)	
COVID-19	Negative	Negative		

Lab Correlations Reference (1) (APA):

Eosinophilia: Causes, treatment. Cleveland Clinic. (2018). Retrieved February 27, 2022, from https://my.clevelandclinic.org/health/diseases/17710-eosinophilia

Holt, S., & Holt, A. the A. S. (2020, May 8). *What medications can cause high liver enzymes?* LiverSupport.com. Retrieved February 27, 2022, from https://www.liversupport.com/what-medications-can-cause-high-liver-enzymes/

Low HGB and HCT. Healthcare. (2022). Retrieved February 27, 2022, from https://www.healthcare-online.org/Low-Hct.html

Mayo Foundation for Medical Education and Research. (2022, February 11). *Low hemoglobin count causes*. Mayo Clinic. Retrieved February 27, 2022, from https://www.mayoclinic.org/symptoms/low-hemoglobin/basics/causes/sym-20050760

Ochocinski, D., Dalal, M., Black, L. V., Carr, S., Lew, J., Sullivan, K., & Kissoon, N. (2020, February 20). *Life-threatening infectious complications in sickle cell disease: A concise narrative review*. Frontiers in pediatrics. Retrieved February 27, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7044152/

Respiratory alkalosis: What is it, treatment & prevention. Cleveland Clinic. (2021). Retrieved February 27, 2022, from https://my.clevelandclinic.org/health/diseases/21657-respiratory-alkalosis

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Retic Hemoglobin

Diagnostic Test Correlation (5 points): The Patient did not receive any diagnostic imaging such as X-ray, Ct, or MRI. The patient did have a panel done for their retic hemoglobin. The retic hemoglobin lab checks for the body's ability to continue erythropoiesis and how much iron is available in the bone marrow to produce hemoglobin. The value of reticulocytes should be above 0.5-2.5, the patient's value is 3.88 (2/22/22). The patient has adequate iron levels to produce RBC, but her anemia is not iron based. .

Diagnostic Test Reference (1) (APA):

Karagülle, M., Gündüz, E., Sahin Mutlu, F., & Olga Akay, M. (2013, June). *Clinical significance of reticulocyte hemoglobin content in the diagnosis of iron deficiency anemia*. Turkish journal of haematology : official journal of Turkish Society of Haematology. Retrieved February 27, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3878462/#:~:text=The%20reticulocytes%E2%80%99%20hemoglobin%20content%20reflects%20the%20amount%20of,has%20been%20proposed%20as%20an%20iron%20status%20marker.

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

Home Medications (5 required)

Brand/Generic	**cabergoline (Dostinex)**	**Cholecalciferol (Vitamin D3)**	**Folic Acid**	**Ibuprofen**	**Sennosides (Senokot)**
Dose	0.5 mg	25 mcg	1 mg	600 mg	8.6 mg

		(1,000 units)			
Frequency	2x week (Mon & Thurs)	1x Daily	1x Daily	Every 6 hours PRN	2x daily
Route	PO	PO	PO	PO	PO
Classification	Dopamine antagonist	Vitamin	Vitamin	NSAID	Stimulant Laxative
Mechanism of Action	Binds with dopamine D2 receptors reducing prolactin level.	Stimulates Calcium and phosphate absorption from the small intestines.	Folic Acid is transported into the cell, where it helps maintain erythropoiesis, purine and thymidylate nucleic acids.	Inhibits prostaglandins, which in turn reduces inflammation and relieves pain.	Stimulates the intestinal cells, causing an influx of fluid.
Reason Client Taking	There is no stated reason that the client is taking this medication, but opioid analgesics can cause hyperprolactinemia. Patient is taking dilaudid at home for pain which is an opioid analgesic.	There is no stated reason for the patient to take this. It may be to increase Vitamin D levels and inturn Calcium levels.	Patient suffers from sickle cell anemia, she is taking Folic acid to help with red blood cell production.	The client uses this as a standard pain control method for minor pains.	The client is actively using opioid analgesics which can cause constipation. Patient is using this OTC to treat occasional constipation.
Contraindications (2)	1. History of cardiac, pericardial, and pulmonary disorders. 2.Uncontrolled hypertension	1.Hypercalcemia 2. Pregnancy	1.Hypersensitivity to folic acid or its components. 2.Vitamin B12 deficiency.	1.Angioedema 2.bronchospasms	1. Hyponatremia 2. Hypokalemia
Side Effects/Adverse Reactions (2)	1.Valvulopathy 2.Dry mouth	1.Vitamin D toxicity 2. sensitivity to Vitamin D.	1.Pruritus 2.Bronchospasms	1.aseptic meningitis 2. heart failure	1.GI bleed 2. Vomiting

Nursing Considerations (2)	1.Make sure the patient has undergone a cardiac workup including an echocardiogram. 2.Check serum prolactin levels.	1.Should be used with caution in patients with chronic kidney disease 2.Check calcium, phosphate, and vitamin D levels prior to prescribing.	1.Chronic alcoholism can affect absorption of the medication 2. Before testing patient's folic acid levels, make sure they are not taking tetracycline as it could cause a false low.	1.should not be used in pregnant women starting at 30 weeks 2.should be avoided with patients who have had a recent MI	1.Patient should take first dose at night. 2.The active ingredient senna can be found in some herbal teas and other medications, ask patient about any herbal teas and medications.

Hospital Medications (5 required)

Brand/Generic	**diphenhydrAMINE (Benadryl)**	**enoxaparin (Lovenox)**	**Ondansetron HCL (Zofran)**	**Hydrocodone-acetaminophen (Norco)**	**Hydromorphone (dilaudid)**
Dose	50 mg in 1 mL	40 mg	4mg	325 mg	1.5 mg
Frequency	Every 4 hours PRN	Every 12 hours	PRN	Every 4 hours PRN	2 hours PRN
Route	IV push	IV Flush	IV push	Oral	IV push
Classification	Antihistamine	Anticoagulant/ low molecular	Antiemetic/ Selective serotonin	opioid analgesic	opioid analgesic

		weight heparin			
Mechanism of Action	Binds with H1 receptors blocking histamines from binding. Histamines are what cause the allergic reactions such as flares, itching, and wheals.	Binds with antithrombin III, blocking the clotting factor.	Blocks receptors in the vagal nerve terminals in the intestines. It reduces nausea and vomiting.	Binds and activates opioid receptor sites in the gray matter, and spinal cord for pain relief.	Binds with the opioid receptors in the spinal cord and higher levels of the CNS.
Reason Client Taking	Patient is allergic to morphine, but is taking the derivative dilaudid. The dilaudid causes itching but is tolerable when taken with Benadryl.	Client is taking this to retain patency of their central port. Which is the only IV access the patient currently has.	Patient was experiencing some nausea with the amount of pain they were in and the pain medications.	Patient is taking in as needed for pain > 7/10.	Patient is taking this consistently both in hospital and at home for sickle cell pain.
Contraindications (2)	1. Breastfeeding 2. hypersensitivity to diphenhydramine.	1.Active major bleeding 2.Pork Products	1.concomitant use of apomorphine 2.hypersensitivity to ondansetron	1. acute or severe bronchial asthma 2.Gastrointestinal blockages	1.Acute asthma 2.severe respiratory depression
Side Effects/Adverse Reactions (2)	1.Arrhythmias 2.thrombocytopenia	1.CHF 2.pulmonary edema.	1.hypotension 2.serotonin syndrome	1.CNS depression 2.hypotension	1.CNS depression 2.laryngeal edema
Nursing Considerations (2)	1.Protect elixir and parenteral forms from light 2.Parenteral should only be given if oral is not possible	1.Use with caution in patients with a history of heparin induced thrombocytopenia 2.use with caution is patients at risk for a hemorrhage.	1.Some oral disintegrating tablets may contain aspartame 2.If hypokalemia or hypomagnesemia is present the electrolyte imbalance should be	1.Hydrocodone has an increased risk of abuse, misuse, and addiction. 2. Hydrocodone should not be given to patients with impared consciousness.	1. Increased risk of a patient abusing this medication. 2.Use with caution in patients whose ability to regulate blood pressure is compromised.

			corrected prior to administration of ondasteron.		

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2021). *Nurse's Drug Handbook* (20th ed.

Medicine.com. (2020). *Cholecalciferol: Dosage, mechanism/onset of action, half-life*. Medicine.com. Retrieved February 26, 2022, from https://www.medicine.com/drug/cholecalciferol/hcp

Medicine.com. (2020). *Folic acid: Dosage, mechanism/onset of action, half-life*. Medicine.com. Retrieved February 26, 2022, from https://www.medicine.com/drug/folic-acid/hcp

PDR Search. Senokot (sennosides) dose, indications, adverse effects, interactions... from PDR.net. (2020). Retrieved February 26, 2022, from https://www.pdr.net/drug-summary/Senokot-sennosides-3182.84

Assessment

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

GENERAL: **Alertness: Alert** **Orientation: X4** **Distress: None** **Overall appearance: Normal**	Patient is alert and oriented x4 to person. place, time, and situation. The patient is in no visible distress currently. A nurse would be checking for any neurological deficits during this time.
INTEGUMENTARY: **Skin color: Normal** **Character:Dry, Intact** **Temperature: Warm** **Turgor:Non- tenting** **Rashes: NONE** **Bruises: NONE** **Wounds: NONE** **Braden Score: 21** **Drains present: Y☐ N ✅** **Type:N/A**	Skin color is appropriate for ethnicity. The skin is warm, dry and intact. There is no notable tenting, rashes, bruises, or wounds. Patient scored a 21 on the Braden Scale meaning she is not at risk of a pressure ulcer. A nurse during this part of the assessment would be looking for any wounds or openings that need to be monitored during the patient's stay at the hospital. It also helps assess if the patient is at risk for developing any injuries.
HEENT: **Head/Neck: Normal, Symmetrical** **Ears: Normal, Bilateral** **Eyes: Normal, bilateral** **Nose: Normal, Symmetrical** **Teeth: Normal**	The Patient's head and neck assessment was normal. Head and neck are symmetrical. Ears are normal with no noted lumps, bumps, or lesions bilateral. Eyes PERRLA, and symmetrical bilaterally. Nose is centered without deviation with no notable deformities. Dentition is good. .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): Normal Sinus Rhythm** **Peripheral Pulses: 2+** **Capillary refill: <3 seconds** **Neck Vein Distention: Y ☐ N ✅** **Edema Y ☐ N ✅** **Location of Edema:**	Cardiac rhythm normal sinus with audible S1 and S2 sounds. Peripheral pulses are palpable 2+. Capillary refill is <3 seconds in all extremities bilaterally. No notable edema in any extremities.

N/A	
RESPIRATORY: **Accessory muscle use: Y☐ N ✅** **Breath Sounds: Location, character** **Clear Bilateral throughout all lobes.**	Breath sounds are normal, clear bilaterally throughout all lobes. Chest rises and falls equally bilateral
GASTROINTESTINAL: **Diet at home: Regular** **Current Diet: Regular** **Height: 165.1 cm (5'5")** **Weight: 142.7 kg (314 lbs)** **Auscultation Bowel sounds: normal** **Last BM: "Yesterday" 2/23** **Palpation: Pain, Mass etc.: Pain upon palpation.** **Inspection:** **Distention: NONE** **Incisions: NONE** **Scars:NONE** **Drains: NONE** **Wounds:NONE** **Ostomy: Y ☐ N ✅** **Nasogastric: Y ☐ N ✅** **Size:** **Feeding tubes/PEG tube Y ☐ N ✅** **Type:**	Patient has notable pain upon palpation, but the patient says it is related to the sickle cell pain. No distention, inclusions, scars, drains, or wounds notable. Bowel sounds are normative in all 4 quadrants.
GENITOURINARY: **Color: Yellow** **Character: Clear** **Quantity of urine: unable to determine** **Pain with urination: Y ☐ N ✅** **Dialysis: Y ☐ N ✅** **Inspection of genitals: N/A** **Catheter: Y ☐ N ✅** **Type:N/A** **Size:**	Urine is yellow and clear upon inspection. No pain upon urination. Amount of urine not determined but two urination occurrences are noted.
MUSCULOSKELETAL: **Neurovascular status: Normal** **ROM: Normal** **Supportive devices:NONE** **Strength: ⅗** **ADL Assistance: Y ☐ N ✅** **Fall Risk: Y ✅ N ☐** **Fall Score: Moderate (6)** **Activity/Mobility Status: ambulatory**	Patient is ambulatory on their own to the restroom. Patient is a moderate fall risk primarily due to polypharmacy.

Independent (up ad lib) ✅ Needs assistance with equipment ☐ Needs support to stand and walk☐	
NEUROLOGICAL: MAEW: Y ✅ N☐ PERLA: Y ✅ N☐ Strength Equal: Y ✅ N ☐ if no - Legs ☐ Arms ☐ Both ☐ Orientation: X4 Mental Status: Normal Speech: Normal Sensory:Normal LOC: Alert, appropriate for age	Patient is orientation X4. Level of consciousness is fully alert. No notable slurs in speech. Strength is equal in all extremities bilaterally.
PSYCHOSOCIAL/CULTURAL: Coping method(s): Music/ Netflix Developmental level: Normal for age Religion & what it means to pt.: Christian Personal/Family Data (Think about home environment, family structure, and available family support): Patient did not talk much of family.	Patient's developmental level is appropriate for age. Patient is of Christian Faith but is not active in a church. Patients main coping methods are watching Netflix and listening to music.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1136	84 bpm	106/65 mmHg	18 bpm	97.9 F (36.6 C) Oral	94% on room air
1334	83 bpm	115/68 mmHg	18 bpm	98.6 F (37 C) Oral	95% on room air

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions

1136	Numbers (1-10)	Upper and Lower Extremities	7	Consistent, Aching, Sharp upon movement	dilaudid every 4 hours PRN, Patient is watching Netflix as a way to distract.
1334	Numbers (1-10)	Upper and Lower Extremities	7	Consistent, Aching, Sharp upon movement	dilaudid every 4 hours PRN and repositioning

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: Port single lumen **Location of IV**:Left Chest **Date on IV:** 1/20/22 **Patency of IV:** normal, flushes with ease **Signs of erythema, drainage, etc.:**NONE **IV dressing assessment:** clean, dry and intact	Lactated Ringer 1,000mL Rate: 50 mL/hr continuous

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
500 mL of water 250 mL of cranberry juice Patient has an IV drip Lactated Ringer continuous (50mL/hr), within 20 hours 1,000mL will be received.	2 urinations occurred but were unable to measure. Patient ambulates and toilets themself.

Nursing Care

Summary of Care (2 points)

Overview of care: Patient was adamant about medications times. The nurse was also accurate on timing, giving medications within the time limit. Patient was self sufficient and did not require much hands on other than during med passing.

Procedures/testing done: Patient had labs drawn for a CBC.

Complaints/Issues: Patients pain was consistently at a 7/10 but that was manageable for the patient.

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: Diet is regular, and patient ambulates on her own, but would not tolerate intense activity with this pain level.

Physician notifications: NONE

Future plans for client: Client is to be discharged home with sufficient pain control.

Discharge Planning (2 points)

Discharge location: Home

Home health needs (if applicable): NONE

Equipment needs (if applicable):NONE

Follow up plan: follow up with primary care about current medications and adjustments. Patient should return to ED if pain worsens.

Education needs: Patient may need to be educated on polypharmacy.

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

● 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	● Explain why the nursing diagnosis was chosen			● How did the client/family respond to the nurse’s actions? ● Client response, status of goals and outcomes, modifications to plan.
1. Impaired gas exchange related to hyperventilation as evidenced by low CO2 levels.	Patient has notable low levels of CO2 and is anemic meaning gas exchange is not happening properly. According to ABC’s airway is top priority.	**1.** Teach patient deep breathing exercises **2.** Continuous O2 monitoring.	**1.** Patient’s blood CO2 level will return to baseline.	Unable to determine at clinical. It is expected that the patient will be receptive to the teachings. The Patient will practice deep breathing to optimize gas exchange. The client will leave the O2 monitor on and there will be adequate blood oxygen levels.
2. Ineffective protection related to sickle cell anemia as evidenced by an increased white blood cell count.	Patient is at risk for infections due to ineffective blood cell production that is	**1.** Promote cleanliness both personally and environmentally. **2.** Teach the patient how to conserve energy.	**1.** The patient will not obtain any new infection.	The patient will increase infection precautions to keep themself safe. The patient will save energy to avoid fatigue from anemia.

	suppressing their immune system.			
3. Risk for fall related to polypharmacy as evidenced by the fall score.	The patient should be educated on the risks of multiple medications, as they take more medications at home including opioid analgesics.	**1.** Assess the patient's strength. **2**. Educate the patient on the risks of polypharmacy.	**1.** Patient will not fall.	The Patient will identify what medications put them at risk for a fall. The patient will take precautions while taking certain medications to avoid a fall. The patient will keep their cell phone close to be able to call for help if needed.

Other References (APA):

Phelps, L. L. (2020). ***Sparks & Taylor's nursing diagnosis reference manual*****. Wolters Kluwer.**

Concept Map (20 Points):

N321 CARE PLAN

Subjective Data

Patient stated that her “Pain is 7/10” when asked on a scale of 1-10 what would hse rate her pain. When asked to describe the pain the patient stated “The Pain is consistent and aching, but sharp upon movement”. When asked about her family history, as none was mentioned in the chart, she stated “No notable family history”.

Nursing Diagnosis/Outcomes

Impaired gas exchange related to hyperventilation as evidenced by low CO2 levels. The expected outcome is the **p**atient’s blood CO2 level will return to baseline.It is expected that the patient will be receptive to the teachings. The patient will practice deep breathing to optimize gas exchange. The client will leave the O2 monitor on and there will be adequate blood oxygen levels.

Ineffective protection related to sickle cell anemia as evidenced by an increased white blood cell count.The patient will not obtain any new infection. The patient will increase infection precautions to keep themself safe. The patient will save energy to avoid fatigue from anemia.

Risk for fall related to polypharmacy as evidenced by the fall score.The outcome the patient will not fall. The Patient will identify what medications put them at risk for a fall. The patient will take precautions while taking certain medications to avoid a fall. The patient will keep their cell phone close to be able to call for help if needed.

Objective Data

- Vital Signs
- Lab Results
- Diagnostic imaging
- Full body Assessment
- Allergies
- Medication list and doses

Client Information

Client: G.A
Age: 35
Gender: Female
African American
Full Code
Height: 165.1 cm (5’5”)
Weight: 142.7 kg (314 lbs)
Not Married
Occupation: Nurse.

Nursing Interventions

1. Teach patient deep breathing exercises

2. Continuous O2 monitoring.
3. Promote cleanliness both personally and environmentally.

4.. Teach the patient how to conserve energy.
5. Assess the patient's strength.

6. Educate the patient on the risks of polypharmacy.