N303 Care Plan #2

Lakeview College of Nursing

Logan Sanford

Demographics (3 points)

Date of Admission 02/09/2019	Patient Initials AB	Age 54 years old	Gender Female
Race/Ethnicity White/Caucasian	Occupation Disabled but used to be a secretary	Marital Status Divorced	Allergies dihydromorphinone (Hydromorphone) and penicillins
Code Status Full Code	Height 172 cm	Weight 108.500 kg	

Medical History (5 Points)

Past Medical History: Alteration in comfort: pain, blood bank alert, depression, history of sickle cell disease, impaired mobility, methicillin-resistant Staphylococcus aureus (MRSA), morbid obesity, obstructive sleep apnea, pregnant, and sickle cell anemia

Past Surgical History: tubal ligation, cesarean section, appendectomy, cholecystectomy, cataract extraction and insertion of intraocular lens x2, cystectomy, tendon operation

Past Family History: mother: diabetes mellitus and hypertension, father: bladder cancer, bone cancer, and lung cancer, brother: diabetes mellitus, heart disease, and hypertension

Social History (tobacco/alcohol/drugs, pertinent social factors): Patient denies any use of tobacco, alcohol, and substances. Patient does not use any assistive devices at home or when she leaves her house. Patient is divorced and lives at home by herself. Patient stated her support system is her friend. Patient stated that she is disabled but used to be a secretary. Patient stated she graduated from high school and has “some college.”

Admission Assessment

Chief Complaint (2 points): Patient presented to the emergency room with complains of left lower extremity pain rating her pain a 10/10.

History of present Illness (10 points): Patient is a 54 year old female with a past medical history of alteration in comfort, blood bank alert, depression, history of sickle cell disease, impaired mobility, methicillin-resistant Staphylococcus aureus (MRSA), morbid obesity, obstructive sleep apnea, pregnant, and sickle cell anemia. The patient presented to the emergency room on February 9, 2019 with complains of left lower extremity pain and rated the pain a 10/10 on the numeric scale. Patient stated a persistent pain started in her left hip/groin and it woke her up in the middle of the night. Patient stated her pain then started radiating to her left knee and before long her entire left lower extremity was in severe, throbbing pain which is when she came to the emergency room. Patient denies any possible injury or trauma to the area. She stated she had similar presentation of symptoms two years ago and brought herself into the emergency room where they treated her with IV fluids and IV morphine and she claimed her pain went away. She also started she has a prescription for hydrocodone bitartrate and acetaminophen (Norco) that she does not take regularly. She stated that she does not currently have a hematologist that she is seeing. She stated she did not take any pain medicine before bringing herself into the emergency room. Nothing she did would make it better and any activity made it worse. Patient stated she takes hydroxyurea and supplemental folic acid regularly. Patient stated she was diagnosed with sickle cell anemia “when she was little.” She denies any chest pain, cough, dyspnea, swelling of the extremities, or previous DVT. Patient has not had diarrhea, abdominal pain or vomiting.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Sickle cell crisis

Secondary Diagnosis (if applicable): Urinary tract infection

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

Sickle cell disease is a complex genetic disorder that goes beyond red blood cells and progresses to a chronic vascular disease. The genetic mutation of the sickle cell gene causes synthesis of Hgb that is more fragile and inefficient at carrying oxygen. Under conditions of hypoxia, stress, infection, or dehydration the sickle cell anemia Hgb is known to polymerize and become distorted which in tern causes the red blood cell to take on a crescent shape. These blood cells have a shortened life span of only ten to twenty days due to the spleen breaking down the cells at a much faster rate than the bone marrow can replace them. The rapid destruction of blood cells results in hemolytic anemia. Due to the sickle shape of these blood cells, they often become trapped, blocking flow and creating obstructions to distal tissues and organs. The occlusion of these vessels can potentially lead to hypoxia of tissues and possible ischemia. These episodes of occlusion are known as a vaso-occlusive crisis. Ongoing vaso-occlusion drives the chronic nature of the disease and is caused by multicellular adhesions among endothelial cells, red blood cells, white blood cells, and platelets. Multicellular adhesions occur due to endothelial damage and inflammation. This causes a chronic upregulation of specific adhesion mediators. Ongoing vaso-occlusion is seen during a vaso-occlusive crisis which is the clinical hallmark of this disease process. These episodes are unpredictable and extremely painful for the patient and can lead to the need for medical intervention. The most common sites for obstruction are the chest, abdomen, long bones, and joints. Vaso-occlusive crises are often associated with decreased quality of life, frequent hospitalizations, and an increased risk of organ damage and death (Capriotti & Frizzell, 2016).

Common signs and symptoms associated with this disease process include anemia, episodes of pain, painful swelling of the hands and feet, frequent infections, delayed growth, and vision problems. Two of the most common complains associated with sickle cell anemia include fatigue and exercise intolerance. This patient presented to the emergency room with pain in her lower left extremity and a preexistent urinary tract infection. Patients with this disease often are seen to have a high amount of bilirubin in the bloodstream causing jaundice and bile concentration in the gallbladder, which often leads to gallstones. Patients during a crisis will often present with weak pulses, cyanosis, and tingling of the extremities. The most common lab abnormalities associated with this disease process include a decreased level of red blood cells, decreased hemoglobin, and decreased hematocrit (Hinkle & Cheever, 2018). A complete blood count (CBC) was drawn on my patient that showed decrease levels of red blood cells, decreased hemoglobin, and decreased hematocrit.

Common diagnostic tests include a blood same to screen for the presence of Hgb S along with a complete blood count to assess for anemia, and a peripheral blood smear that will show the typical sickle-cell shaped cells (Hinkle & Cheever, 2018). The patient was already previously diagnosed with sickle cell anemia before admission to the hospital so no diagnostic tests were done on the patient to diagnose the disease. However, a CBC was done on the patient to verify the diagnosis of sickle cell anemia.

Common treatments for this disease process and crisis focus on the administration of fluids and pain medicine. A large amount of fluid is administered to flush out occlusive areas of cells to prevent excess ischemia and excessive pain to the extremities. Pain medication, such as opioids, are administered to treat the pain of the crisis. Often times hydroxyurea is prescribed to prevent vaso-occlusive episodes. This acts by increasing the level of fetal Hgb in erythrocytes. In

some cases, bone marrow transplants are required to replace defective bone marrow with healthy bone marrow. Often times patients will be on prophylactic antibiotics to prevent infection in these patients due to their increased risk for infection (Capriotti & Frizzell, 2016). This patient was prescribed hydroxyurea to take daily and was being treated with normal saline fluids and morphine upon admission.

References

Capriotti, T., & Frizzell, J. P. (2016). Pathophysiology: Introductory concepts and clinical perspectives. Philadelphia: F.A. Davis Company.

Hinkle, J.L., & Cheever, K. H. (2018). *Brunner & Suddarth's Textbook of Medical-Surgical Nursing* (14th ed.). Philadelphia, Pa: Wolters Kluwer Health Lippincott Williams & Wilkins.

Laboratory Data (15 points)

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.8-5.41	2.88 (L)	2.23(L)	Patients with sickle cell anemia have low red blood cell counts due to the body destroying the blood cells and not enough RBC's can be produced to keep up with distraction of the cells (Hinkle & Cheever, 2018).
Hgb	11.3-15.2	11.5	9.0 (L)	Patients with sickle cell anemia have low red blood cell counts which then decreases the amount of Hgb present in the body. This happens due to the body destroying the blood cells and not enough RBC's can be produced to keep up with the distraction of the cells (Hinkle & Cheever, 2018).

Hct	33.2-45.3	33.4	25.9 (L)	Patients with sickle cell anemia have low red blood cell counts which then decreases the amount of Hct present in the body. This happens due to the body destroying the blood cells and not enough RBC's can be produced to keep up with the distraction of the cells (Hinkle & Cheever, 2018).
Platelets	149-393	440 (H)	323	High platelet counts are seen in patients with infections. This patient was diagnosed with a urinary tract infection upon admission to the hospital (Hinkle & Cheever, 2018).
WBC	4.0-11.7	11.9 (H)	7.2	High WBC counts are seen in patients with infections. This patient was diagnosed with a urinary tract infection upon admission to the hospital (Hinkle & Cheever, 2018).
Neutrophils	2.4-8.4	8.4	3.7	.
Lymphocytes	0.8-3.7	2.4	2.3	.
Monocytes	4.4-12.0	6.5	12.2 (H)	Monocytes are chronically elevated in patients blood disorders and are acutely elevated in patients with infection (Hinkle & Cheever, 2018). This patient has a history of sickle cell anemia and a recent diagnosis of a urinary tract infection.
Eosinophils	0.0-6.3	1.1	4.0	.
Bands	0-5	N/A	N/A	.

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
Na+	136-145	140	N/A	.
K+	3.5-5.1	4.6	N/A	.
Cl-	98-107	104	N/A	.

CO2	22-29	27	N/A	.
Glucose	70-99	104 (H)	N/A	High glucose levels are often seen in patients with an infection and who are experiencing stress (Hinkle & Cheever, 2018). Her glucose could have been elevated due to her recently eating breakfast also.
BUN	6-20	9	N/A	.
Creatinine	0.50-0.90	0.52	N/A	.
Albumin	3.5-5.2	N/A	N/A	.
Calcium	8.6-10.4	8.6	N/A	.
Mag	1.6-2.4	N/A	N/A	.
Phosphate	8.6-10.4	N/A	N/A	.
Bilirubin	0.0-1.2	N/A	N/A	.
Alk Phos	40-130	N/A	N/A	.
AST	0-40	N/A	N/A	.
ALT	0-41	N/A	N/A	.
Amylase	56-90	N/A	N/A	.
Lipase	13-60	N/A	N/A	.
Cholesterol	< 200	N/A	N/A	.
Triglycerides	< 150	N/A	N/A	.
Lactic Acid	< 150	N/A	N/A	.
Troponin	0.00-0.30	N/A	N/A	
CK-MB	0.00-7.70	N/A	N/A	
Total CK	20-200	N/A	N/A	

Chemistry: Highlight Abnormal—Explanations must be in complete sentences and contain in-text citations in APA format.

Other Tests Highlight Abnormal—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	2.0-3.0	N/A	N/A	.
PT	9.6-11.8	N/A	N/A	.
PTT	20-36	N/A	N/A	.
D-Dimer	< 500	N/A	N/A	.
BNP	0.5-30	N/A	N/A	.

Urinalysis Highlight Abnormal—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	yellow/hazy	Hazy urine can indicate a urinary tract infection Hinkle & Cheever, 2018). This patient was diagnosed with a UTI upon admission.
pH	5.0-8.0	N/A	5.0	.
Specific Gravity	1.005-1.034	N/A	1.008	.
Glucose	Normal	N/A	Normal	.
Protein	Negative	N/A	Negative	.
Ketones	Negative	N/A	Negative	.
WBC	<=5	N/A	17 (H)	Elevated white blood cells in urine indicate a urinary tract infection (Hinkle & Cheever, 2018). This patient was diagnosed with a urinary tract infection upon admission.
RBC	0-3	N/A	<1	.

Leukoesterase	negative	N/A	1+ (A)	Leukoesterase present in urine indicates a urinary tract infection (Hinkle & Cheever, 2018). This patient was diagnosed with a urinary tract infection upon admission.

Arterial Blood Gas Highlight Abnormal—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**	
PaO2	**80-100**	**N/A**	**N/A**	
PaCO2	**35-45**	**N/A**	**N/A**	
HCO3	**21-26**	**N/A**	**N/A**	
SaO2	**95%-99%**	**N/A**	**N/A**	

Cultures Highlight Abnormal—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	

Lab Correlations Reference (APA):

Hinkle, J.L., & Cheever, K. H. (2018). ***Brunner & Suddarth's Textbook of Medical-Surgical Nursing*** **(14th ed.). Philadelphia, Pa: Wolters Kluwer Health Lippincott Williams & Wilkins.**

Diagnostic Imaging—All Other Diagnostic Tests (EKG, Echocardiogram, X-rays, CT scan, etc.) (5 points): Patient did not have any diagnostic tests performed.

Diagnostic Test Correlation, APA Format & References (5 points): N/A

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

Brand/Generic	**medroxyprogesterone (Provera)**	**hydroxyurea (Droxia)**	**furosemide (Lasix)**	**estradiol (Estrace)**	**folic acid (Folvite)**
Dose	**2.4 mg, 1 tablet, daily**	**500 mg (see instructions)**	**20 mg, 1 tablet, daily, PRN**	**0.5 mg, 1 tablet, daily**	**1 mg, 1 tablet, daily**
Route	**PO**	**PO**	**PO**	**PO**	**PO**
Classification	**Pregnen 4 derivative**	**Antimetabolite and antineoplastic**	**Loop Diuretic**	**Estrogen**	**Antianemics and vitamins**

Action	**Inhibits gonadotrophin production which then prevents follicular maturation and ovulation**	**Action is unknown but it assumed that it inhibits DNA synthesis by acting as a ribonucleic reductase inhibitor**	**Blocks the absorption of sodium, chloride, and water from the filtered fluid in the kidney tubules**	**Binds to estrogen receptors to develop and maintain female sex characteristics and reproductive systems**	**Aids in transferring a single methyl group in various metabolic reactions in the body and functioning of the nervous system. It is important in DNA synthesis and cell division by affecting hematopoietic cells or other blood forming cells that rapidly divide as well as cancer cells.**

Reason Client Taking	**Patient is taking due to heavy mensural periods and due to the increase risk of cancer in her family. This medication helps prevent uterine cancer.**	**To reduce the frequency of painful crises and to reduce the need for blood transfusions due to sickle cell anemia with recurrent painful crises**	**Patient has a past medical history of pulmonary edema**	**To treat symptoms of vulvar and vaginal atrophy associated with menopause**	**Patient has a past medical history of anemia**
Contraindications (2)	**Active DVT, PE, or history of these conditions and undiagnosed abnormal genital bleeding**	**Pregnancy and kidney disease with reduction in kidney function**	**Hyperglycemia and diabetes mellitus**	**Undiagnosed abnormal general bleeding and known or suspected estrogen-dependent neoplasia**	**Pernicious anemia and breast-feeding mothers**
Side Effects/Adverse Reactions (2)	**Breast tenderness and breakthrough bleeding**	**Mouth sores and hair loss**	**Diarrhea and vertigo**	**Weight changes and bloating**	**Poor appetite and trouble sleeping**

Nursing Considerations (2)	**Monitor BP periodically during therapy and monitor intake and output ratios and weekly weight. Report significant discrepancies or steady weight gain**	**Assess for signs of infection (fever, sore throat, cough, pain in the lower back, or difficulty/painful urination) and assess for bleeding**	**Monitor daily weight and I/O's**	**Caution patient of the risks of estrogen use, the need to prevent pregnancy, and the importance of frequent follow ups and arrange for pretreatment and periodic history and physical including breasts, blood pressure, abdomen, pelvic organs, and a Pap smear**	**Assess for signs of megaloblastic anemia (fatigue, weakness, dyspnea) and give antacids 2 hours after folic acid**

Client Teaching needs (2)	**Keep a one month supply available at all times and withdraw bleeding will happen 3-7 days after discontinuing the medication**	**Inform the patient that long term use may increase the risk of developing cancer and drowsiness may occur with this medication (avoid driving and operating heavy machinery until response to drug is known).**	**Contact provider immediately if rash, muscle cramps, nausea, dizziness or tingling of the extremities occur and notify provider of weight gain of 3 pounds in 1 day**	**Can not be taken if pregnant and this drug should be taken in cycles or short term; arrange a calendar of drug days, rest days, and drug-free periods**	**Take regularly at the same time every day and it helps to relieve symptoms such as unusual tiredness and diarrhea that can occur with some types of anemia**

Home Medications (5 required)

Brand/Generic	**docusate (Colace)**	**naloxone (Narcan)**	**morphine (Duramorph)**	**enoxaparin (Lovenox)**	**ceftriaxone (Rocephin)**
Dose	**100 mg, 1 tablet, BID**	**0.4 mg = 1 mL, Q2min, PRN**	**2 mg = 1 mL, q2h, PRN**	**40 mg = 0.4 mL, daily**	**1,000 mg = 50 mL, q24h**
Route	**PO**	**IV push, injectable**	**IV push, injectable**	**SQ injectable**	**IVPB, injectable**
Classification	**Stool softener**	**Opioid antagonist**	**Opioid analgesic**	**Anticoagulant**	**Cephalosporin antibiotic**

Action	**Acts by lowering the surface tension at the oil-water interface of the feces which allows water and lipids to penetrate the stool. This helps to hydrate and soften the stool**	**Not fully understood but is said that it works by competing for the same receptor sites that opioids bind to**	**Unknown but has been shown to bind to and inhibit GABA inhibitory interneurons which inhibit the descending pain inhibition pathway**	**Binds to and potentiates antithrombin which then forms a complex that irreversibly inactivates clotting factor Xa**	**Inhibits bacterial cell wall synthesis by binding to transpeptidases**
Reason Client Taking	**Patient is on IV morphine. Opioids have a tendency to constipate patients.**	**Patient has a prescription for an opioid and this is always ordered as a precaution for any patient prescribed an opioid**	**Sickle cell crisis is treated with pain medicine. Patient has a past medical history of sickle cell anemia and was admitted for a sickle cell crisis**	**Every patient in the hospital has an order for Lovenox to prevent DVT's and PE's while in the hospital**	**Patient was diagnosed with a UTI upon admission to the hospital**
Contraindications (2)	**Pregnancy and breast feeding**	**Abnormal heart rhythm and liver problems**	**Decreased lung function and severe liver disease**	**Major active bleeding and patients with thrombocytopenia**	**Known hypersensitivity to cephalosporins and neonates**
Side Effects/Adverse Reactions (2)	**Urine discoloration and throat irritation**	**Restlessness and flushing of the skin**	**Constipation and lightheadedness**	**Swelling in hands and feet and fever**	**Diarrhea and vomiting**

Nursing Considerations (2)	**Asses for abdominal distention, presence of bowel sounds, and usual pattern of bowel function and assess the color, consistency, and amount of stool produced**	**Monitor vital signs and monitor for respiratory depression**	**Monitor blood pressure prior to administration of the drug (hold if systolic is under 100 mm Hg or 30 mm Hg below baseline) and reassess pain after administration of the drug**	**Monitor periodically CBC for blood counts and assess urine and stool for signs of blood**	**Assess patient for skin rash often and obtain specimens for culture and sensitivity before initiating therapy**
Client Teaching needs (2)	**Laxatives should be used only for short term use and use other forms of bowel regulations with this to increase mobility like drinking 1-2 L of fluid a day and increasing bulk in the diet**	**Narcan reverses deadly opioid overdose symptoms and Narcan can produce withdrawal symptoms in people who are chronic users of these pain medications**	**It is important to start ahead of pain, when a patient starts to experience pain he/she should request the pain medicine and change positions slowly to minimize orthostatic hypotension**	**Report new bruises or blood spots under the skin and do not rub injection site**	**Report severe diarrhea and report signs of adverse effects such as diarrhea, vomiting, erythema, and Stevens-Johnson syndrome**

Hospital Medications (5 required)

Medications Reference (APA Format):

Cella, D. D. (2017). *Nurse's Drug Handbook* (Sixteenth ed.). Burlington, MA: Jones & Bartlett Learning.

Assessment

NEUROLOGICAL (2 points): **MAEW: Y ☐ N☐** **PERLA: Y ☐ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation, Mental Status, Speech, Sensory, LOC: LOC x4**	**Patient is A&O x4 with the ability to communicate her needs to the health care team. Patient is able to MAEW and has bilaterally equal strength in her legs and arms. Her pupils were round and reacted/accommodated to light. Patient has no signs of neurological deficits.**
MUSCULOSKELETAL (2 points): **Neurovascular status, ROM, Supportive devices/strength** **ADL Assistance Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Activity/Mobility Status:** **Independent (up ad lib)** **Needs assistance with equipment: patient does not need assistance with equipment** **Needs support to stand and walk: patient does not need support to stand or walk**	**Morse Fall Risk Score: 45** **Patient does not need assistance to sit, stand, or walk. Patient does not require assistance with activities of daily living. Patient is considered a fall risk due to drowsiness from medication. Patients range of motion was WDL as well as her neuromuscular status.** .

CARDIOVASCULAR (2 points): **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable): regular rate and rhythm** **Peripheral Pulses: Palpable** **Capillary refill: < 3 seconds** **Neck Vein Distention: Y ☐ N ☐** **Edema Y ☐ N ☐** **Location of Edema: N/A**	**Patients heart sounds were regular with a normal sinus rhythm. There was no murmur heard upon auscultation during the assessment. Patients peripheral pulses were palpable and capillary refill was < 3 seconds. Patient presented with no neck vein distention and no edema.**
RESPIRATORY (2 points): **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character**	**Patient showed no use of accessory muscles while assessing her breathing. Patients breath sounds were clear bilaterally with no wheezes or crackles heard upon auscultation.**
GASTROINTESTINAL (2 points): **Diet at home: Regular** **Current Diet: Regular** **Height: 173 cm** **Weight: 108.500 kg** **Auscultation Bowel sounds: hypoactive** **Last BM: 02/10/2019** **Palpation: Pain, Mass etc: no pain or masses were present upon palpation and inspection of the abdomen** **Inspection: distention, incisions, scars, drains, wounds: none present** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Feeding tubes/PEG tube Y ☐ N ☐** **Type: N/A**	**Patient follows a regular diet at home and is on a regular diet in the hospital. Patients height is 173 cm and weighs 108.500 kg. Patient has been nauseous and unable to eat and is also on an opioid so her bowel sounds were hypoactive. Patients last bowel movement was on 02/10/2019. Patient had no masses present upon palpation and complained of no abdominal pain. There was no abdominal distention present. There were no incisions, scars, drains, or wounds present. Patient did not have an ostomy and did not have a nasogastric tube. Patient did not have tube feedings.**
INTEGUMENTARY (2 points): **Skin color** **character, turgor, rashes, bruises: wounds: patients skin was pink, warm, and dry. Her skin did not tent, patient has no rashes or open wounds, patient did not have any bruises .** **Braden scale: 21** **Drains present: Y☐ N ☐** **Type: N/A**	**Patients skin appeared healthy, pink, warm, and dry with no rashes, bruises, or wounds. Patients skin turgor did not tent upon assessment. Patient did not appear to have any discoloration on the skin and did not have any drains present.** **Braden Scale: 21**

HEENT (2 points): **Head: normocephalic** **Ears: normal hearing** **Eyes: no visual problems** **Nose: no sinus tenderness** **Teeth: appeared healthy with irritation to the gums**	**Patients head, ears, eyes, nose and teeth appeared healthy with no signs of irritation to the gums. Patient mucous membranes were moist.**
GENITOURINARY (2 Points): **Color, character, quantity of urine, pain,** **Dialysis Y ☐ N ☐** **Inspection of genitals: healthy with no open wounds or discoloration** **Catheter: Y ☐ N ☐ Type: N/A**	**Patient stated her urine is yellow and hazy. Patient stated no discomfort upon urination. Patient is not on dialysis and does not have a catheter. Patients perineal area appeared healthy with no open wounds or discoloration.**
PSYCHOSOCIAL/CULTURAL (2 points): **Coping methods: Spending time with friends and read** **Educational level: some college** **Developmental level: psychological and developmental level coincide** **Ethnicity: white/caucasian** **Religion & what it means to pt: Christian** **Occupation (previous if retired): secretary on disability** **Personal/Family Data (Think about home environment, family structure, and available family support): friend is her support person**	**Upon assessing the patient she stated she uses time with friends and reading as a way of coping. Patient stated she graduated high school with her high school diploma and has "some college education." Patients psychological and developmental skills coincide. Patient is white/caucasian. Patient is a disabled secretary that lives at home by herself. Patient stated she grew up as a Christian but does not attend church. Patient has a friend that helps her and supports her. Patient plans on going home after discharge.**

Physical Exam (18 points)

Vital Signs, 2 sets (5 points)

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1200	84 bpm	115/62	18 bpm	36.9C	97%
1600	79 bpm	126/61	20 bpm	37.2C	96%

Vital Sign Trends:

Patients vital signs were at a desirable level and appeared normal throughout my shift.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1200	Numeric scale	Left lower extremity	2/10	achy	No interventions were taken or needed
1600	Numeric scale	Left lower extremity	2/10	achy	No interventions were taken or needed

IV Assessment (2 Points)

Site Location, Patency/Condition & Date	Fluid Type/Rate or Saline Lock
Left peripheral antecubital 22 gauge placed on 02/09/2019. IV was dry, intact, and there was no phlebitis or infiltration present. Catheter was patent.	Normal Saline IV drip 1,000 mL @ 125mL/hr

Intake and Output during Your Shift (2 points)

Intake	Output
2,746 mL	**1,150 mL**

Nursing Care

Summary of care- Narrative of Nursing care provided, patient status throughout the day, any major concerns, etc. (2 points):

The patient preferred doing things on her own and was very independent. The majority of the care I provided to her was assisting her to the bathroom, getting her water when needed, assessing her pain, and assisting with her vital signs. The patient did not leave the floor during my shift for any testing or procedures. The patients pain was managed but her nausea was uncontrolled. My main focus throughout the shift was making sure her pain was well managed and communicating with the nurse on her status. I encouraged her to get up and walk to the bathroom when she felt the urge prevent constipation from the pain medicine. The education I provided to the patient was the importance of staying on top of pain and the importance of her pain being managed. My other focus was to get her out of bed to encourage bowel movements. The patients only complaint during my shift was that she was unable to eat and nothing was making her nausea go away. The nurse contacted the provider to see if she could get an order for an antiemetic. The patients vital signs were stable throughout the whole shift. There were not any concerns as far as labs to report the nurse. The patient tolerated activity well. I anticipate the patient will not need any extra assistance at home upon discharge.

Discharge Planning- Identify discharge needs, education, home health services/equipment, family involved, etc. (2 points):

Patient will go home by herself to her house upon discharge. Patient will not need any home health care needs or additional equipment. Patient will need to follow up with a hematologist. The patient stated she does not currently have one so she may need assistance in finding one. It is important for the patient to understand the importance of hydration with sickle cell anemia. She should be consuming 1-2 liters of fluid per day. If the patient is exposed to hot, dry climates or is exercising she should consume 2-3 liters of fluid per day. It is also important for the patient to take her prescription of hydroxyurea every day to prevent painful crises. By taking this every day

it may help to reduce the number of crises that occur and can prevent painful crises from occurring.

Nursing Diagnosis (15 points)
Must be NANDA approved nursing diagnosis and listed in order of priority

Nursing Diagnosis • Include full nursing diagnosis with "related to" and "as evidenced by" components	**Rational** • Explain why the nursing diagnosis was chosen	**Intervention (2 per dx)**	**Evaluation** • How did the patient/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications to plan.
1. Ineffective tissue perfusion **related to** vaso-occlusive nature of sickling, inflammatory response **as evidenced by** bone pain	In patients with sickle cell anemia it is often seen that the cells get stuck together very easily which makes the risks of a clot more likely that can lead to the extremities not getting the appropriate blood supply and bone pain and tingling may occur	**1.** Assess skin for pallor, cyanosis, coolness, diaphoresis, and delayed capillary refill **2.** Monitor vital signs and assess pulse points for rate, rhythm, and volume.	**The patient was cooperative and expressed an understanding of the importance of assessing pulses and skin for signs of ineffective tissue perfusion. The goal was meet and the patients pulses were palpable and her skin showed no signs of ineffective perfusion. She verbalized an understanding for reporting any tingling or discoloration of the extremities. No modifications were needed.**

2. Risk for infection **related to** chronic disease and splenic malfunction **as evidenced by** urinary tract infection	Patients with sickle cell disease are at a higher risk for infection due to the the malfunction of the spleen and the improper filtering of the blood. This patient was admitted to the emergency room with a preexisting urinary tract infection.	**1. Assess for signs and symptoms of infection (fever, overall malaise, pain)** **2. Encourage the importance of hand hygiene**	**The patient was cooperative and showed an understanding of the importance of reporting signs of infection to a provider or the health care team and that the number one prevention of infection is hand hygiene. The goal was met and the patient verbalized the importance of washing her hands frequently and staying away from anyone that has an infection. No modifications were needed.**
3. Acute pain **related to** intravascular sickling with localized stasis, occlusion, and infarction/necrosis **as evidenced by** localized left lower extremity pain	During a sickle cell crisis the patient experiences acute pain. When the patient presented to the emergency room she rated her pain a 10/10 on the numeric scale and has a persistent pain rating of 2/10 since day of admission.	**1.** Assess for pain and document the location, duration, and intensity of the pain **2**. Administer pain medication as prescribed by the doctor and requested by the patient	**The patient was cooperative and showed an understanding of what was causing the pain. She also understood the importance of pain management and staying on top of the pain. This goal was met and the patients pain was well managed. She did not report her pain over a 2/10 since the day she presented to the emergency room. No modifications were needed.**

4. Impaired gas exchange **related to** decreased oxygen-carrying capacity of the blood, reduced RBC life span, and abnormal RBC structure **as evidenced by** restlessness	Due to the abnormal structure and reduced RBC the patient is at risk for impaired gas exchange which can lead to the patient feeling tired, restless, and irritable. This patient presented with all of these symptoms.	**1.** Monitor respiratory rate, depth, use of accessory muscles, and areas of cyanosis. **2.** Limit patients activity and assist with ADL's if needed	**The patient was cooperative and showed an understanding for the importance of deep breathing and to report signs of lightheadedness or "not feeling right." The goal was met and the patient verbalized an understanding for the importance of promoting lung expansion by breathing deeply. Her respirations were 20 bpm which is considered normal. No modifications were needed.**
5. Knowledge deficit **related to** lack of exposure about cause and treatments to sickle cell anemia **as evidenced by** inadequate fluid intake and not taking pain medicine	It is important for the patient to know ways of treating and preventing a sickle cell crisis. The patient stated she does not normally drink 1-2 L of fluid per day and did not take her PRN morphine when symptoms of pain started occurring	**1.** Encourage the consumption of 1-2 liters of fluid per day **2.** administer fluids to the patient to increase blood volume and prevent the RBC from sticking	**The patient was cooperative and showed an understanding for the importance of proper hydration. The goal was met and the patients blood pressure was within normal limits (126/61). The patient verbalized an understanding of increasing her oral fluid consumption upon discharge from the hospital to help prevent the RBC's from sticking and causing another crisis. No modifications were needed.**

Overall APA Format/Neatness/Grammar (5 point):

Type to enter text

- Patient rated pain 10/10 upon admission
- Patient now rates pain 2/10
- Patient complains of pain in the left lower extremity
- Patient stated she did not take pain medicine before coming into the emergency room
- Pat ients blood pressure was 126/61 upon admission
- Pat ient does not have a fever (37.2C)
- Pat ients respirations were elevated (22bpm)

Patient presented to the emergency room on the morning of 02/09/2019 with pain in her left lower extremity. Patient rated the pain a 10/10. She stated her pain started in the middle of the night and woke her up. The pain started in her left hip, then radiated to her left knee before it consumed her entire left lower extremity. Patient said the pain was throbbing. She did not take pain medicine.

1. Ineffective tissue perfusion related to vaso-occlusive nature of sickling, inflammatory response as evidenced by bone pain
   1. By discharge, patient will show no signs of ineffective tissue perfusion such as severe bone pain.
2. Risk for infection related to chronic disease and splenic malfunction as evidenced by urinary tract infection
   1. By discharge, patients urine will appear clear instead of cloudy.
3. Acute pain related to intravascular sickling with localize stasis, occlusion, and infarction/necrosis as evidenced by localized left lower extremity pain
   1. By discharge, patients patient will rate her pain a 1-2 out of 10 or the pain will have resolved.
4. Impaired

nts)

- A ssess pain frequently
- A dminister pain medicine as prescribed by the provider
- A dminister IV fluids as prescribed by the provider
- A ssess skin for cyanosis
- A ssess neurological status
- I onitor vital signs