N441 Care Plan

Lakeview College of Nursing

ADELE MOANDA

Demographics (3 points)

Date of Admission 2/8/2022	Client Initials T M	Age 52 y/o	Gender F
Race/Ethnicity Native American	Occupation Unemployed	Marital Status Single	Allergies No know allergies
Code Status Full Code	Height 5'8"	Weight 67.6 Kg (149 lb.)	

Medical History (5 Points)

Past Medical History: Hypertension, left foot drop, candidiasis of esophagus 6/4/2020, diabetes mellitus, diabetic ketoacidosis 5/29/2020, depression, chronic anemia, chronic kidney disease stage 3 due to type 1 diabetes mellitus, duodenal ulcer, leukocytosis, and hyperkalemia.

Past Surgical History: C-section, upper gastrointestinal endoscopy

Family History: Mother has a chronic hypertension

Social History (tobacco/alcohol/drugs including frequency, quantity, and duration of use): The patient claimed that she quit smoking in 2006, she never used any drugs or drank alcohol.

Assistive Devices: N/A

Living Situation: The patient lives in the trailer home with her son.

Education Level: The patient says that she has a college degree in computer sciences.

Admission Assessment

Chief Complaint (2 points): The patient came to the hospital because she experienced nausea, vomiting of blood, and weakness.

History of Present Illness – OLD CARTS (10 points): 52 yo female patient with a medical history of diabetes mellitus type 1, chronic kidney disease, and hypertension was admitted

to the hospital on 02/08/2022 because she was vomiting blood, having a persistent episode of nausea that started in the morning, around 9 am, and exaggeration fatigue. She stated that she could not take any morning medication due to the vomiting and nausea. The patient complained of slight pain in the chest and heartburn that she rated 4/10. The pain increased while vomiting and did not relieve until she decided to come to the hospital. On admission day, the patient's blood glucose level was elevated (700 mg/dL.) and high blood pressure of 168/102.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Diabetes ketoacidosis

Secondary Diagnosis (if applicable): N/A

Pathophysiology of the Disease, APA format (20 points): Diabetic Ketosis is a serious diabetes complication that occurs when the blood sugar level in the body becomes higher, and there is insufficient insulin to digest sugar. Because of the accumulation of those sugar, the body compensates by breaking down fat as energy. The fat produced by the body transforms into ketones that build up in the bloodstream and urines in the form of ketones (Hinkle & Cheever, 2018). The kidney has a significant role in removing excess water, salts, and wastes from the body. While there is extra blood sugar in the body, the kidney has done its functions by excreting the glucose. This higher concentration of glucose can cause damage to the kidney and the liver because the liver has a responsibility to metabolize the fats produced by the body. The cause of diabetic ketoacidosis includes type 1 diabetes mellitus, inadequate insulin treatment, infection, and poor concordance with insulin used (Evans, 2019). It can also be due to prolonged vomiting, alcohol, drug abuse in diabetic

patients, and a missing insulin dose. Hinkle & Cheever (2018) report that diabetic ketoacidosis has some clinical characteristics, including hyperglycemia, acidosis, dehydration, and electrolyte loss. The client with diabetic ketoacidosis will present those symptoms: nausea, abdominal pain, vomiting, shortness of breath, weakness or fatigue, confusion, fruity breath, and an excess thirst (Hinkle & Cheever, 2018). Diagnostic testing uses to identify diabetic ketoacidosis, including high urine ketone levels, elevated BUN, a low pH <7.3, elevated creatine levels, low potassium, low sodium levels, and high blood glucose levels >250 mg/dL. Ms. TM has low RBCs, RBC (2.81), Hgb (8.8), and Hct. (27.6). Her urine shows a presence of ketones, proteins, and glucose in the urine. When performing an hourly bedside glucose check, Ms. TM's s blood glucose levels were significantly elevated: 600, 371, 297, and 177.

Moreover, diabetic ketoacidosis can be treated by rehydration with 0.9% sodium chloride to help maintain tissue perfusion or dextrose 5% in water to prevent a decline in blood glucose levels. According to Hinkle & Cheever (2018), regular insulin is the only type of insulin approved for IV use to add in solution to treat diabetic ketoacidosis. Still, it is prescribed into IV drip rates by unit per hour. When administering an insulin drip, some modification done with the rate correlated to the blood sugar monitor. To allow a frequent change in insulin drip rate, it is recommended that the insulin drip be separated from the rehydration solution, normal saline, D5W, or 0.45% solution. For example, for Ms. TM the insulin drip rate started if seven units/hr. when her blood glucose was between 300-700 mg/ dL. The sooner the value started going down, and she had a titrate IV that said to cut the dose at half if BG is between 70-200 mg/dL and notify the provider to get future direction if BG decreased to 100 mg/dL. It happens that at 1100, Ms. TM's blood glucose levels

dropped by 77 mg/dL. The nurse called the physician for a new direction; the physician ordered the nurse to stop the insulin IV drip infusion and to start dextrose 50% IV solution to increase the blood sugar by eliminating the hypoglycemia caused by the insulin drip.

Pathophysiology References (2) (APA):

Evans K. (2019). Diabetic ketoacidosis: update on management. *Clinical medicine (London, England)*, *19*(5), 396–398. https://doi.org/10.7861/clinmed.2019-0284

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

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	**3.80-5.41**	**3.27**	**2.81**	**Low. Anemia occurs when your body has a low level of RBC by a defect in its production or destruction, kidney impairment, anemia, and hemorrhage. (Hinkle & Cheever, 2018). Ms. TM has medical history of anemia and she had projectile vomiting blood on admission.**
Hgb	**11.3-15.2**	**10.4**	**8.8**	**Low. Anemia is reported as a low hemoglobin (Hinkle & Cheever, 2018). Ms. TM has medical history of anemia and she had projectile vomiting blood on admission.**
Hct	**33.2-45.3 %**	**31.4**	**27.6**	**Low. A low Hct indicates that there is little RBC in the body (Hinkle & Cheever, 2018). Ms. TM has a medical history of anemia, and she was vomited blood. So it is expected to find a low hematocrit because of lack of RBC.**

Platelets	**149-493**	**428**	**370**	**Normal**
WBC	**4-11,7 K**	**16.70**	**16.70**	**Elevated. Patient with DK can have a high WBC due to the high acidity in the blood (Hinkle & Cheever, 2018).**
Neutrophils	**45.3-79**	**82.8**	**83.3**	**Normal**
Lymphocytes	**11.8-45.9**	**24**	**22**	**Normal**
Monocytes	**4-4-12.0**	**8.9**	**8.3**	**Normal**
Eosinophils	**0.0-6.3**	**0.0**	**0.0**	**Normal**
Bands	**0-500**	**N/A**	**N/A**	**N/A**

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal
Na-	**135-145**	**139**	**143**	**Normal**
K+	**3.5-5.1**	**5.0**	**4.5**	**Normal**
Cl-	**98-107**	**106**	**103**	**Normal**
CO2	**22-29**	**19**	**13**	**Low. Due to diabetic ketoacidosis. The body becomes more acidic because there is insufficient insulin to digest sugar (Hinkle & Cheever, 2018).**
Glucose	**70-99**	**700**	**371**	**Elevated. Diabetic ketoacidosis is due to an elevated of blood glucose (Hinkle & Cheever, 2018). Ms. Tm has a diabetes mellites type 1.**
BUN	**7-25**	**74**	**67**	**Elevated. It is expected to see an increase of BUN in a patient with diabetic ketoacidosis because the kidney excretes a lot of amounts of glucose (Hinkle & Cheever, 2018). Ms. TM has chronic kidney disease stage 3.**

Creatinine	**0.5-1.20**	**3.62**	**3.45**	**Elevated. t is expected to see an increased level of creatinine in a patient with diabetic ketoacidosis because the kidney excretes a lot of amounts of glucose (Hinkle & Cheever, 2018). Ms. TM has chronic kidney disease stage 3.**
Albumin	**3.5-5.7**	**3.5**	**3.8**	**Normal**
Calcium	**8.6-10.4**	**9.1**	**8.6**	**Normal**
Mag	**1.6-2.4**	**N/A**	**N/A**	**N/A**
Phosphate	**3.4-4.5**	**N/A**	**N/A**	**N/A**
Bilirubin	**0.2-1.2**	**N/A**	**N/A**	**N/A**
Alk Phos	**35-105**	**95**	**95**	**Normal**
AST	**5-40**	**15**	**N/A**	**N/A**
ALT	**7-56**	**29**	**N/A**	**Normal**
Amylase	**30-110**	**N/A**	**N/A**	**N/A**
Lipase	**60-160**	**N/A**	**N/A**	**N/A**
Lactic Acid	**0.5-20**	**N/A**	**N/A**	**N/A**
Troponin	**>0.04**	**N/A**	**N/A**	**N/A**
CK-MB	**3-5**	**N/A**	**N/A**	**N/A**
Total CK	**22-198**	**N/A**	**N/A**	**N/A**

Other Tests Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal

INR	**0.8-1.2**	**N/A**	**N/A**	**N/A**
PT	**11.9-15**	**N/A**	**N/A**	**N/A**
PTT	**25-35**	**N/A**	**N/A**	**N/A**
D-Dimer	**<0.50**	**N/A**	**N/A**	**N/A**
BNP	**2.5-7.1**	**N/A**	**N/A**	**N/A**
HDL	**<50**	**N/A**	**N/A**	**N/A**
LDL	**<100**	**N/A**	**N/A**	**N/A**
Cholesterol	**125-200**	**N/A**	**N/A**	**N/A**
Triglycerides	**<150**	**N/A**	**N/A**	**N/A**
Hgb A1c	**<5.7**	**N/A**	**N/A**	**N/A**
TSH	**0.5-5.0**	**N/A**	**N/A**	**N/A**

Urinalysis Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Lab Test	Normal Range	Value on Admission	Today's Value	Reason for Abnormal
Color & Clarity	**Yellow/clear**	**Yellow/ cloudy**	**Yellow/ cloudy**	**Ms. TM's urine is cloudy due to protein, glucose, and ketone in urine. Diabetic ketoacidosis might cause a buildup of sugar and ketones in the urine; and make the urine appears cloudy (Hinkle & Cheever, 2018).**
pH	**5.0-8-0**	**N/A**	**N/A**	**N/A**
Specific Gravity	**1.003-1.030**	**N/A**	**1.020**	**Normal**
Glucose	**Neg**	**N/A**	**3+**	**Positive glucose in the urine. DK makes an accumulation of glucose due to it higher concentration (Hinkle & Cheever, 2018). Ms. TM is diabetic acidosis patient.**
Protein	**Neg**	**N/A**	**3+**	**Positive protein in the urine. Due to high concentration of**

				ketones in the urines (Hinkle & Cheever, 2018).
Ketones	**Neg**	**N/A**	**3+**	**Positive ketones in the urine. DK produced ketones in the body (Hinkle & Cheever, 2018). So, it is expected to see a ketone in Ms. TM's urine.**
WBC	**Neg**	**N/A**	**N/A**	**N/A**
RBC	**Neg**	**N/A**	**N/A**	**N/A**
Leukoesterase	**Neg**	**N/A**	**N/A**	**N/A**

Arterial Blood Gas Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	**7.35-7.45**	**N/A**	**N/A**	**N/A**
PaO2	**>80 mm Hg**	**N/A**	**N/A**	**N/A**
PaCO2	**35-45**	**N/A**	**N/A**	**N/A**
HCO3	**22-26**	**N/A**	**N/A**	**N/A**
SaO2	**>94 %**	**96%**	**97%**	**Normal**

Cultures Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
Urine Culture		**N/A**	**Waiting for the result.**	**The test was done on 02/09/2022, but the result is not back yet.**
Blood Culture	**Negative**	**N/A**	**N/A**	**N/A**
Sputum Culture	**Negative**	**N/A**	**N/A**	**N/A**

Stool Culture	**Negative**	**N/A**	**N/A**	**N/A**

Lab Correlations Reference (1) (APA):

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

Diagnostic Imaging

All Other Diagnostic Tests (5 points):

- **XR chest single view on 02/08/2022**

  Findings: clear lungs bilaterally, normal size of the heart without any acute disease.

Diagnostic Test Correlation (5 points): The X-ray is a crucial diagnostic tool used to roll out any abnormalities in the heart and lungs because it shows the structures of the lungs and heart (Al Shammari et al., 2021). On admission, Ms. TM complained of slight chest pain, so they did a chest x-ray to ensure no cardiac or lung complications. Her chest x-ray showed a normal heart size with clear bilateral lungs without infusion.

Diagnostic Test Reference (1) (APA):

Al Shammari, M., Hassan, A., AlShamlan, N., Alotaibi, S., Bamashmoos, M., Hakami, A., Althunyan, A., Basager, S., Motabgani, S., Aljubran, S., & Alsaif, H. S. (2021). Family medicine residents' skill levels in emergency chest X-ray interpretation. *BMC family practice*, *22*(1), 39. https://doi.org/10.1186/s12875-021-01390-3

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

Home Medications (5 required)

Brand/	**Acetamino**	**Amlodipine**	**Insulin**	**Pantoprazole/**	**Venlafaxine/**

Generic	**phen/ Tylenol** **(Skidmore-Roth, 2018, p. 6-8).**	**/ Norvasc** **(Skidmore-Roth, 2018, p. 54-55).**	**glargine/ Lantus** **(Skidmore-Roth, 2018, p. 534-536).**	**Protonic** **(Skidmore-Roth, 2018, p. 774-776).**	**Effexor-XR** **(Skidmore-Roth, 2018, p. 1039-1041).**
Dose	**650 mg**	**5 mg tablet**	**30 unit**	**40 mg tablet**	**75 mg**
Frequency	**2 tabs q6 hrs. PRN**	**Take 1 tab daily**	**Nightly**	**Take 1 tab**	**75 mg by mouth nightly**
Route	**PO**	**PO**	**Subcutaneous**	**PO**	**PO**
Classification	**Nonopioid analgesic Nonsalicylate**	**Calcium channel blocker, Antihypertensive**	**Antidiabetic, pancreatic hormone**	**Proton pump inhibitor, Benzimidazole**	**Second generation SNRI, antidepressant**
Mechanism of Action	**May block pain impulse peripherally that occur in response to inhibition of prostaglandin.**	**Inhibits calcium ion influx across cell membrane and produces relaxation of cardiac muscles**	**Decrease blood glucose by transporting glucose into the cells.**	**Suppress gastric acid secretion by inhibit hydrogen/potassium ATPase enzyme system in gastric parietal cell.**	**Inhibits serotonin and norepinephrine uptake.**
Reason Client Taking	**Mild to severe pain**	**Ms. TM has a hypertension**	**Diabetes mellitus Type 1**	**GI reflux and heart burn**	**Ms. TM has a medical history of depression**
Contraindications (2)	**Hepatic Alcoholism**	**GERD CHF**	**Hypoglycemia Hepatitis disease**	**Low magnesium level. Systemic lupus erythematosus.**	**MI Seizure disorder**
Side Effects/Advers	**1.GI bleeding**	**1.Headache 2.Fatigue**	**1.Dry mouth**	**1.Headache 2.Insomnia**	**Tremors Dizziness**

e Reactions (2)	**2.Abdominal pain**		**2.Blurred vision**		
Nursing Considerations (2)	**1.Assess for fever and pain.** **2.Chect I&O**	**1. Assess Skin turgor** **2. monitor for Hypotension**	**1.Monitor polydipsia** **2.Monitor sign of hypoglycemia (sweeting, fatigue, and tachycardia)**	**1.Monitor GI system: bowel sounds q8hr.** **2. Monitor for any lesion in the mouth.**	**Monitor B/P when the pt. changes the position** **2.Monitor constipation and daily weight.**
Key Nursing Assessment(s)/ Lab(s) Prior to Administration	**Monitor liver function: AST and ALT.** **Monitor bilirubin and creatinine**	**Monitor ALT, AST, bilirubin** **Monitor platelet count: if < 150,000/mm3**	**Monitor urine ketones** **Monitor blood glucose level**	**Monitor sodium and magnesium levels.** **Monitor hepatic enzymes: ALT, AST, alkaline phosphatase.**	**Monitor CBC and leukocytes.** **Monitor BUN, creatinine, AST, and ALT.**
Client Teaching needs (2)	**Advice the report sign of bleeding, bruising. Malaise, and fever.** **Advise the patient to avoid alcohol and another OTC medication**	**Advise patient to exercise and stress reduction.** **Teach the patient to monitor B/P.**	**Advice pt. that this product does not kill diabetes, but it controls it.** **Advise pt. to report signs of ketoacidosis: nausea, flushed**	**Advise pt. to report diarrhea.** **Advise pt. to avoid salicylates and ibuprofen. It may cause GI bleeding.**	**Teach pt. to avoid taking others CNS depressants medications.** **Advise pt. to report rash in the skin and hives.**

			skin, and acetone breath		

Hospital Medications (5 required)

Brand/Generic	**Ondansetron/ Zofran (Skidmore-Roth, 2018, p. 745-747).**	**Prochlorperazine/ Compazine (Skidmore-Roth, 2018, p. 824-826).**	**Dextrose 50% solution/ Dextrose monohydrate (Skidmore-Roth, 2018, p. 291).**	**Calcium Carbonate/Toms (Skidmore-Roth, 2018, p. 149-150).**	**Dextrose 5% in water/DEXtrose (Skidmore-Roth, 2018, 291).**
Dose	**4 mg**	**5 mg**	**12 g**	**1000 mg tab**	**7 unit**
Frequency	**4 mg q4hr PRN**	**5 mg IV q6hr PRN**	**12 g IV PRN**	**1000 mg q8hr PRN**	**Continuous infusion**
Route	**IV**	**IV**	**IV**	**PO**	**IV**
Classification	**Antiemetic, 5-HT receptor antagonist**	**Antiemetic, antipsychotic**	**Caloric agent**	**Antiacid, calcium supplement**	**Caloric agent**
Mechanism of Action	**Prevent nausea and vomiting by blocking serotonin peripherally in the small intestinal.**	**Decreases dopamine neurotransmission by increasing dopamine turnover.**	**Increasing blood glucose by decreasing insulin release. Restores the blood glucose levels.**	**Neutralizes gastric acidity**	**Replace lost fluids and provide carbohydrates to the body.**

Reason Client Taking	**Prevent nausea and vomiting.**	**Calm the patient, reduce vomiting, and to decrease anxiety**	**To help to increase blood sugar if the pt. has low blood glucose.**	**To decrease acidic sensation.**	**Increases intake of calories, increases fluids intake to the pt.**
Contraindications (2)	**Pt with a prolongation QT Torsades de pointes**	**Parkinsons disease and glaucoma.**	**Intra cranial hemorrhage Pt. with thrombosis**	**Dehydration GI obstruction**	**Liver disease Hypokalemia**
Side Effects/Adverse Reactions (2)	**Dry mouth constipation**	**Tremors Drowsiness**	**Diarrhea Vomiting**	**Diarrhea Vomiting**	**Fever Nausea**
Nursing Considerations (2)	**Assess for skin rash Monitor shuffling gait.**	**Assess mental status and orientation Monitor I/O**	**Monitor Blood glucose level Monitor pt. for headache, double vision, and confusion.**	**Assess for headache N/V, and dysrhythmias**	**Monitor blood glucose levels and VS. Provide comfort to the pt. to reduce anxiety**
Key Nursing Assessment(s)/Lab(s) Prior to Administration	**Monitor potassium and sodium**	**Monitor CBC**	**Monitor BUN and creatinine**	**Monitor Calcium, phosphates, chloride. And magnesium levels.**	**Monitor ALT and AST**
Client Teaching needs (2)	**Instruct pt. to report diarrhea or constipation. Advise pt. to report any rash**	**Adverse pt. to report sore throat. Teach pt. to use good oral hygiene and frequent rising her mouth to avoid oral**	**Advise pt. to ask for help when she wants to move Advise pt. to report chest pain and tremors.**	**Advise pt. to increase fluids to 2 L unless contraindicated. Adverse pt. to avoid caffeine.**	**Adverse pt. to report fatigue Advise pt. to report swelling, and shortness of breath.**

	in the skin.	**candidiasis**			

Medications Reference (1) (APA):

Skidmore-Roth, L. (2018). *Mosby's drug guide for nursing students*. St. Louis, MO: Elsevier.

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	**The client appears alert and oriented to person, time, and place. She is showing no sign of distress and no fever. She shows a sign of fatigue.**
INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** **Drains present: Y☐ N ☐** **Type:**	**The patient's skin is pink, moist, and warm in touch. Skin turgor has normal elasticity. She does not have rashes, bruises, or wounds. The patient has black hair. Capillary refill < 2 sec. The patient does not have any drains.** **Braden Score = 20 (Average)**
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	**Head is in midline no deviation. No trachea deviation. No lymph node palpable, thyroid is not palpable. Carotid pulse is regular. No drainage from eye bilaterally, Auricle pink without lesion. Patient uses glasses for lecture. PEERLA present. No drainage from eye bilaterally. Septum is Medline. Oral mucosa is pink and moist. No lesion noted in the mouth. Teethes are slightly white.**

CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** **Capillary refill:** **Neck Vein Distention: Y ☐ N ☐** **Edema Y ☐ N ☐** **Location of Edema: N/A**	**Heart sounds are normal, regular rhythm, S1, and S2 are present, normal, and regular. No acute distress, gallop, or murmur. No carotid bruit was noted.** **The radial pulse is regular and strong bilaterally 2+, and the pedal is strong 2+ palpable bilateral. No edema noted.**
RESPIRATORY: **Accessory muscle use: Y☐ N ☐** **Breath Sounds: Location, character** **ET Tube:** **Size of tube:** **Placement (cm to lip):** **Respiration rate:** **FiO2:** **Total volume (TV):** **PEEP:** **VAP prevention measures:**	**The patient is generally breathing at room temperature. She does not use the accessory muscle or cough. The patient denied SOB, the anterior and posterior lung sounds are clear, with regular rhythm and pattern equal bilateral in auscultation for a full minute in 6 places in the chest and 6 in the back of the chest with no wheezing and no crackles.** **Ms. TM does not have an ET tube.**
GASTROINTESTINAL: **Diet at home:** **Current Diet** **Height:** **Weight:** **Auscultation Bowel sounds:** **Last BM:** **Palpation: Pain, Mass etc.:** **Inspection:** **Distention:** **Incisions:** **Scars:** **Drains:** **Wounds:** **Ostomy: Y ☐ N ☐** **Nasogastric: Y ☐ N ☐** **Size:** **Feeding tubes/PEG tube Y ☐ N ☐** **Type:**	**The patient claimed that she eats regular food at home, but Ms.TM has been NPO since admission. Flat abdomen with hyperactive bowel sounds in four quadrants. The patient's abdomen is soft, painless without mass noted in palpation.** **There is a scar from the c-section. There is no drainage, no wounds, no ostomy bag in the abdomen. The patient had a last BM early morning today at 0600. The patient does not have any feeding tubes or PEG tubes.**
GENITOURINARY: **Color:** **Character:**	**The patient can ambulate to the bathroom with one-person assistance. The urine looks yellow/cloudy. No evidence of Urine infection,**

Quantity of urine: **Pain with urination: Y ☐ N ☐** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** **Catheter: Y ☐ N ☐** **Type:** **Size:** **CAUTI prevention measures:**	**no odor. The patient does not complain of any pain during urination. No sign of genital infection, no dialysis. Ms. TM avoided 500 mL at 10 am.**
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☐** **Fall Risk: Y ☐ N☐** **Fall Score:** **Activity/Mobility Status:** **Independent (up ad lib) ☐** **Needs assistance with equipment ☐** **Needs support to stand and walk☐**	**The patient is showing much fatigue during ROM.** **The upper- and lower-member strength bilaterally, 4/4. It does not use any supportive devices for mobility. She can stand up and walk with one person assisted standing by to use the bathroom because she has IV infusion in place. No equipment is used now.** **The patient needs assistance and supervision with the bathroom to prevent falls.** **Fall score: 10 (Moderate fall risk).**
NEUROLOGICAL: **MAEW: Y ☒ N☐** **PERLA: Y ☒ N☐** **Strength Equal: Y ☐ N ☐ if no -** **Legs ☐ Arms ☐ Both ☐** **Orientation:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	**The patient appears alert and oriented X3. MAEW is expected compared to her age. PERLA is present, and she reacts in light. The upper members' strength is equally bilaterally. She speaks English well. The patient shows no sign of neurological deficit. Currently, she is showing restlessness.**
PSYCHOSOCIAL/CULTURAL: **Coping method(s):** **Developmental level:** **Religion & what it means to pt.:** **Personal/Family Data (Think about home environment, family structure, and available family support):**	**The patient is Christian; she trusts Jesus as a son of God. She lives in the trailer house with her son. The patient has a college degree in computer sciences. She is employed, her son helped with living.**

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
0845	**80**	**115/64**	**16**	**97.4**	**96%**

1115	**76**	**121/69**	**18**	**97.8**	**98%**

Vital Sign Trends/Correlation: There is not trending vital sign because all vital signs value is within expected range.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
0845	**0/10**	**N/A**	**N/A**	**N/A**	**N/A**
1115	**0/10**	**N/A**	**N/A**	**N/A**	**N/A**

IV Assessment (2 Points)

IV Assessment	Fluid Type/Rate or Saline Lock
Size of IV: **Location of IV:** **Date on IV:** **Patency of IV:** **Signs of erythema, drainage, etc.:** **IV dressing assessment:**	The patient has a single limen in the metacarpal vein with 20 gauge on the top of the left hand. Currently, she is receiving an IV infusion of D5Wpatent. The Iv catheter is intact and clean without erythema or infiltration.
Other Lines (PICC, Port, central line, etc.)	N/A
Type: **Size: N/A** **Location: N/A** **Date of insertion: N/A** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	N/A

Intake and Output (2 points)

Intake (in mL)	Output (in mL)
800 mL	**500 mL**

Nursing Care

Summary of Care (2 points)

On 02/08/2022, a 52 yo Native American female patient with a medical history of hypertension, left foot drop, candidiasis of the esophagus, diabetes mellitus, diabetic ketoacidosis, depression, chronic anemia, chronic kidney disease stage 3, duodenal ulcer, leukocytosis, and hyperkalemia.

She was admitted to the hospital because of the episode of projectile vomiting blood and nausea that started in the morning, around 9 am. She complained of slight pain in the chest and heartburn that she rated 4/10. The pain increased while vomiting and did not relieve until she decided to come to the hospital. On admission day, the patient's blood glucose level was elevated (700 mg/dL.) and high blood pressure of 168/102. Her lab values show decreased RBCs, RBC (2.81), Hgb (8.8), and Hct (27.6) because she has diabetic ketoacidosis, and chronic anemia. So, the body has able to produce many RBCs. She also has positive ketones, proteins, and glucose in the urine.

The nurse on a charge was doing an hourly bedside blood glucose monitor. The patient was on an hourly monitor of blood glucose level because she was on an insulin drip to help decrease the level of glucose in the blood. She had titrated IV insulin that was modified according to the bedside blood glucose level. During the day, the values range were: 600, 371, 297, 177, 101, and 77. However, when the blood glucose drops down to 77. The doctor asked the nurse to stop the insulin drip and give a patient Dextrose 50% IV solution to

bring the blood sugar back up. She is still NPO until the blood sugar level comes back within a normal value. The patient is generally breathing at room temperature, with no sign of distress. The patient denied SOB and pain, the anterior and posterior lung sounds are clear. Heart sounds are normal, regular rhythm, S1, and S2 are present, normal, and regular.

Overview of care:

Procedures/testing done: An X-Ray chest single view was done on 02/08/2022 to detect any lungs or heart issues. However, the result shows a clear lung bilaterally and normal heart size without any acute disease.

Ms. TM's lab values show decreased RBC (2.81), Hgb (8.8), and Hct (27.6) because she has diabetic ketoacidosis with a medical history of anemia and chronic kidney disease stage 3. The nurse on a charge was doing an hourly bedside blood glucose monitor.

Complaints/Issues: The patient exhibits much fatigue; she denied feeling nauseated or vomited.

Vital signs (stable/unstable): All vital signs are stable with no complaints of pain. At 0845 and 1115, Ms. TM rates her pain 0/10.

Tolerating diet, activity, etc.: Ms. TM was NPO until her blood glucose levels decreased.

Physician notifications: Dr. Ibrahim

Future plans for client:

- **The patient needs to take her insulin dose as prescribed and not skip a dose.**
- **The patient needs to increase her fluids intake to avoid dehydration and balance her electrolytes.**

- **The patient needs to monitor her diet and exercise to help balance her blood sugar levels.**

Discharge Planning (2 points)

Discharge location: No discharge plan at this point.

Home health needs (if applicable): patient verbalizes that she would like to go back home and leaves with her son.

Equipment needs (if applicable): No equipment needs. Patient walked to use the bathroom with a one-person standing by for supervision

Follow up plan: There is not a fallow up plan yet because the patient needs to become stable before discharge.

Education needs:

- **Ms. TM has chronic anemia, and she will increase food rich in iron such as red meat, spinach, beans, and seafood to help with anemia. She had a low Hg, RBC, and Hct; increasing iron food intake will increase those values.**
- **Ms. TM needs to know the importance of managing her diabetes mellitus to avoid diabetic ketoacidosis.**

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	**Rationale** • Explain why the nursing diagnosis was chosen	**Interventions (2 per dx)**	**Outcome Goal (1 per dx)**	**Evaluation** • How did the client/family respond to the nurse's actions? • Client response, status of goals and outcomes, modifications

• Listed in order by priority – highest priority to lowest priority pertinent to this client				to plan.
1.Deficiency fluid volume related to vomiting as evidence patient states that she starts vomiting since 0900. **(Mustafa et al., 2020)**	**Ms. TM has projectile vomiting blood, and she is receiving Dextrose 5% in water to replace the fluid lost.**	**1. Assess skin turgor, oral mucous membrane q8hr. to check for dehydration.** **2.Monitor and record vital signs q4hr to detect the signs of fluid volume deficit and electrolytes, including dyspnea and tachycardia.**	**1. The patient will not feel nauseated and will not have an episode of vomiting.**	**The patient tolerated the D5W very well. She did not vomit during the IV infusion. Patient did not show any sign of fluid overload, no edema, and lungs are clear bilaterally. She does not have crackles in the lungs.**
2.Imbalance nutrition less than body requirement related to the inability of the tissue to use glucose correctly as evidence Ms. TM's blood glucose level was 700 mg/dL. **(Phelps, 2020)**	**Ms. TM is NPO because she is on an insulin drip to help bring down her blood glucose levels.**	**1. Monitor electrolytes and CBC.** **2.Administer antiemetic medications as prescribed to avoid vomiting.**	**1. The patient will show balance nutrition, and her blood glucose levels will be within the normal limit**	**The patient's blood sugar values are not stable yet. It is going up and down, and she complains of excessive fatigue. She tolerated her antiemetic drug, and she did not vomit today.**
3. The risk for unstable blood glucose levels is related to insulin deficiency and	**Ms. TM's blood glucose is elevated, and she is on**	**1.Administer insulin as prescribed to decrease blood glucose levels.**	**1. The patient's blood sugar level will go down, and she will exhibit no sign of diabetic**	**Ms. TM was receiving insulin drip; she tolerated the medication well. She shows**

bad blood glucose management, as evidenced Ms. TM having elevated blood glucose >500 mg/dL on admission day. **(Phelps, 2020)**	**ketoacidosis therapy due to insulin imbalance.**	**2. Educate the patient on the importance of exercise to help maintain diabetes because exercise helps glucose go into the cells.**	**ketoacidosis.**	**motivation to engage in physical activity and exercise when she will discharge from the hospital.**
4.Deficient knowledge related to diabetic ketoacidosis as evidence Ms. TM has a blood glucose of 700 mg/dL, and she missed her insulin injection dose of Lantus on 02/07/2022 **(Mustafa et al., 2020)**	**Ms. TM states that she did not self-administrate Lantus on 02/07/2022 because she was not feeling well.**	**1. Reinforce education on respecting the therapy and not skipping insulin doses.** **2. Assess the patient's knowledge of hypo/hyperglycemia to ensure adequate management and future episodes. And teach Ms. TM about healthy nutrition to help manage diabetes mellitus.**	**1. Patient will exhibit a motivation to learn about the complications of diabetes mellitus.**	**Ms. TM needs more education and reinforcement about her health conditions because she continuously asked for food while on an insulin drip.**
5.Fatigue related to anemia as evidence Ms. TM claimed that she is feeling fatigued; she had a decreased RBC (2.81),	**Ms. TM has a past medical history of anemia and kidney failure. Her CBC lab shows a decrease in RBC, Hgb,**	**1.Monitor Hgb, Hct., and RBC** **2. Educate the patient to conserve energy to ask for help for her ADLs. It will reduce the risk of falls.**	**1. Patient will verbalize a decrease of fatigue and will stay alert or awake.**	**Ms. TM CBC lab is still showing a decrease in RBC, Hgb, and Hct. She is showing a lot of fatigue.**

Hgb (8.8), and Hct (27.6). **(Phelps, 2020)**	**and Hct.**			

Other References (APA):

Mustafa, Zvikomborero, & Eunor. (2020). 4 diabetic ketoacidosis and HHNS nursing care plans. *Nurseslabs.* Retrieved February 14, 2022, from https://nurseslabs.com/diabetic-ketoacidosis-nursing-care-plans/

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

Concept Map (20 Points):

Subjective Data

* Patient reported vomiting of blood that started on 02/08/2021 at 0900
* Patient stated that she could not take any morning medication due to the vomiting and nausea.
* Patient report feeling of fatigue
* Patient rates her pain 0/10

Nursing Diagnosis/Outcomes

1. Deficiency fluid volume related to vomiting as evidence patient states that she starts vomiting since 0900. The patient will not feel nauseated and will not have an episode of vomiting.
2. Imbalance nutrition less than body requirement related to the inability of the tissue to use glucose correctly as evidence Ms. TM's blood glucose level was 700 mg/dL. The patient's blood glucose levels will be within the normal limit.
3. The risk for unstable blood glucose levels is related to insulin deficiency and bad blood glucose management, as evidenced Ms. TM having elevated blood glucose >500 mg/dL on admission day. The patient will exhibit no sign of DK.
4. Deficient knowledge related to diabetic ketoacidosis as evidence Ms. TM has a blood glucose of 700 mg/dL, and she missed her insulin injection dose of Lantus on 02/07/2022. Patient will exhibit a motivation to learn about the complications of diabetes mellitus.
5. Fatigue related to anemia as evidence Ms. TM claimed that she is feeling fatigued; she had a decreased RBC (2.81), Hgb (8.8), and Hct (27.6). Patient will verbalize a decrease of fatigue.

Objective Data

02/09/2021 Lab

- RBC=2.81
- Hgb=8.8
- Hct=27.6

02/08/2022

An X-Ray chest single view was done to detect any lungs or heart issues. The result shows a clear lung bilaterally and normal heart size without any acute disease.

02/09/2022

Client Information

On 02/08/2022, a 52 yo Native American female patient with a medical history of hypertension, diabetes mellitus, diabetic ketoacidosis, depression, chronic anemia, chronic kidney disease stage 3, duodenal ulcer, and hyperkalemia. She was admitted to the hospital because of the episode of projectile vomiting blood and

Nursing Interventions

1.Assess skin turgor, oral mucous membrane q8hr. to check for dehydration.
2.Monitor and record vital signs q4hr to detect the signs of fluid volume deficit and electrolytes, including dyspnea and tachycardia.
3. Monitor electrolytes and CBC.
4. Administer antiemetic medications as prescribed to prevent vomiting.
5. Administer insulin IV as prescribed to decrease blood glucose levels.
6. Reinforce education on respecting the therapy and

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