N441 Care Plan

Lakeview College of Nursing

Olivia Powell

Demographics (3 points)

Date of Admission 3/28/2022	**Client Initials** T.L.	**Age** 19 years old	**Gender** Female
Race/Ethnicity African American	**Occupation** Unemployed	**Marital Status** Single	**Allergies** NKDA
Code Status Full	**Height** 5’2	**Weight** 148lbs	

Medical History (5 Points)

Past Medical History: Diabetic Ketoacidosis, Type 1 Diabetes Mellitus, brain lesion

Past Surgical History: The patient has no past surgical history.

Family History: Maternal Grandmother: diabetes, hypertension

Social History (tobacco/alcohol/drugs including frequency, quantity and duration of use): The patient reported no use of tobacco or alcohol. The patient reported she uses marijuana on occasion with her friends.

Assistive Devices: The patient does not use assistive devices.

Living Situation: The patient lives in a two-story home with her mother, grandmother, and uncle.

Education Level: The patient reported she graduated from high school.

Admission Assessment

Chief Complaint (2 points): “My chest is hurting, and I have shortness of breath and I am having cramps”

History of Present Illness – OLD CARTS (10 points): T.L. is a 19-year-old female who presented to the Emergency Department on 3/28/22 around 11:00 pm. She reported having chest tightness with some abdominal pain that had lasted all day. The patient described the pain as a dull, discomfort type of pain. She stated that moving makes it worse and that relaxing helps

some. Her blood glucose level upon arrival was over 500. T.L. stated she administered 30 units of insulin 30 minutes before arriving. After being assessed in the Emergency Department, she was then admitted to the critical care unit for further treatment. She was placed on an insulin drip with D5W. She is stable, tired, with minimal interaction in conversation.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): Diabetic Ketoacidosis

Secondary Diagnosis (if applicable): n/a

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

Diabetic ketoacidosis, also known as DKA, is a complication related to diabetes. The complication is so severe that it can be life-threatening if not treated properly. Diabetic ketoacidosis occurs when an insulin deficiency in the body with increased insulin counter-regulatory hormones and insulin resistance leads to dehydration, electrolyte imbalance, ketosis, and hyperglycemia (Capriotti, 2020). This complication of diabetes usually occurs in patients that have type 1 diabetes mellitus. When the body does not produce enough insulin to help blood sugar into the cells for energy, diabetic ketoacidosis can occur (Capriotti, 2020).

Some early signs of diabetic ketoacidosis are increased thirst and urinating more than usual (Capriotti, 2020). The signs and symptoms of diabetic ketoacidosis consist of deep breathing, fruit-smelling breath, headache, nausea, and vomiting. A prevalent sign of diabetic ketoacidosis is very elevated blood sugar (Hinkle & Cheever, 2018). Some other signs and symptoms of diabetic ketoacidosis include muscle stiffness, increased tiredness, and a flushed face (Hinkle & Cheever, 2018).

Multiple tests have to be conducted for a patient to be diagnosed with diabetic ketoacidosis. These tests include measuring the patient's plasma glucose concentration, pH level,

and bicarbonate level. The patient's blood glucose level must be above 250 mg per dL, a pH level less than 7.30, and bicarbonate of 18 mEq or less (Capriotti, 2020). These labs are specific to diabetic ketoacidosis. An average blood glucose concentration is from 90-110mg/dL, and a patient with blood glucose over 250 indicated diabetic ketoacidosis as long as the other labs are abnormal. A pH level of less than 7.30 in a diabetic patient means the patient is acidotic. The bicarbonate level is also associated with the low pH as the body is acidotic (Capriotti, 2020).

The treatment for diabetic ketoacidosis includes fluid replacement, electrolyte replacement, and insulin therapy (Hinkle & Cheever, 2018). Fluid replacement will help the patient become hydrated again. The electrolyte replacement will replenish the electrolytes in the body in the absence of insulin (Capriotti, 2020). Insulin therapy will help the body become less acidic from the high blood sugar levels (Caprotti, 2020).

The patient presented to the emergency department complaining of chest tightness, tachycardia, abdominal pain, and a blood glucose level of over 500. These are consistent with diabetic ketoacidosis. The patient has a history of diabetic ketoacidosis and is a type 1 diabetic, which puts her at risk for another episode of DKA. The patient had an EKG performed, revealing normal sinus rhythm with tachycardia. Her lab work was also abnormally favoring another DKA episode. The patient will be educated on diet and insulin therapy for discharge as she is noncompliant with her diabetic treatment.

Pathophysiology References (2) (APA):

Caprotti, T. (2020) *Davis advantage for pathophysiology: introductory concepts and clinical perspectives.* (2nd Edition). F.A. Davis. Company

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

Laboratory Data (15 points)

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

Lab	Normal Range	Admission Value	Today's Value	Reason for Abnormal Value
RBC	3.80 - 5.30	4.58	4.04	Within normal limits
Hgb	12.0 - 15.8	14.0	12.1	Within normal limits
Hct	36.0 - 47.0	43.3	36.4	Within normal limits
Platelets	140 - 440	318	286	Within normal limits
WBC	4.00 - 12.00	6.80	3.5	The patient poorly controls her diabetes mellitus type 1. This causes a reduction in circulating WBC (Hinkle & Cheever, 2018).
Neutrophils	47.0 - 75	74.8	44.0	Neutrophils infiltrate the pancreas in type 1 diabetes mellitus patients. The low number can be caused from an abnormal neutrophil maturation within the body (Hinkle & Cheever, 2018).
Lymphocytes	18 - 42	18.7	46.0	The patient has type 1 diabetes mellitus. The lack of insulin production can cause a rise in lymphocytes (Hinkle & Cheever, 2018).
Monocytes	4 - 12	5.3	8.0	Within normal limits
Eosinophils	0 - 5	0.2	1.2	Within normal limits
Bands	0 - 5	1.0	0.8	Within normal limits

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

Lab	Normal Range	Admission Value	Today's Value	Reason For Abnormal

Na-	**136 - 145**	**131**	**136**	**The patient has type 1 diabetes mellitus. The elevated blood glucose shifts water from intracellular space to extracellular space (Hinkle & Cheever, 2018).**
K+	**3.5 – 5.1**	**3.3**	**3.7**	**The patient was receiving insulin and fluids to help bring her blood glucose level back to normal (Hinkle & Cheever, 2018).**
Cl-	**98 - 107**	**99**	**103**	**Within normal limits**
CO2	**21.0 – 32.0**	**7**	**21**	**The CO2 is low due to the episode of diabetic ketoacidosis. The body is not producing enough insulin to digest the sugars (Hinkle & Cheever, 2018).**
Glucose	**60 - 99**	**459**	**357**	**The patient did not control her sugars and went into a diabetic ketoacidosis episode (Hinkle & Cheever, 2018). The patient also has a history of DKA.**
BUN	**7 - 18**	**9**	**5**	**The patient was in a DKA episode causing the patient to have a volume depletion (Hinkle & Cheever, 2018).**
Creatinine	**0.70 – 1.30**	**0.85**	**0.71**	**Within normal limits**
Albumin	**3.4 – 5.0**	**4.3**	**3.4**	**Within normal limits**
Calcium	**8.5 – 10.1**	**8.5**	**8.3**	**The patient has type 1 diabetes which causes profound bone deterioration of calcium (Hinkle & Cheever, 2018).**
Mag	**1.6 - 2.6**	**1.9**	**1.7**	**Within normal limits**
Phosphate	**2.5 - 4.5**	**2.8**	**n/a**	**Within normal limits**
Bilirubin	**0.0 – 1.2**	**n/a**	**n/a**	**n/a**
Alk Phos	**40 – 150**	**143**	**n/a**	**Within normal limits**
AST	**16 – 40**	**n/a**	**n/a**	**n/a**

ALT	**7 - 52**	**n/a**	**n/a**	**n/a**
Amylase	**23 – 85**	**n/a**	**n/a**	**n/a**
Lipase	**0 - 160**	**n/a**	**n/a**	**n/a**
Lactic Acid	**0.50 – 2.20**	**n/a**	**n/a**	**n/a**
Troponin	**0.0 – 0.04**	**n/a**	**n/a**	**n/a**
CK-MB	**5 - 25**	**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	**10 – 14 sec**	**n/a**	**n/a**	**n/a**
PTT	**30 – 45 sec**	**n/a**	**n/a**	**n/a**
D-Dimer	**100.0 – 399.0**	**n/a**	**n/a**	**n/a**
BNP	**15.00 – 99.90**	**n/a**	**n/a**	**n/a**
HDL	**<200**	**n/a**	**n/a**	**n/a**
LDL	**>60**	**n/a**	**n/a**	**n/a**
Cholesterol	**<200**	**n/a**	**n/a**	**n/a**
Triglycerides	**<140**	**n/a**	**n/a**	**n/a**
Hgb A1c	**<6.5**	**n/a**	**n/a**	**n/a**
TSH	**0.4 – 4.0**	**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	Colorless-Yellow, Clear	n/a	n/a	n/a
pH	5.0 – 7.0	n/a	n/a	n/a
Specific Gravity	1.003 – 1.005	n/a	n/a	n/a
Glucose	Negative	n/a	n/a	n/a
Protein	Negative	n/a	n/a	n/a
Ketones	Negative	n/a	n/a	n/a
WBC	0 – 25/uL	n/a	n/a	n/a
RBC	0 – 20/uL	n/a	n/a	n/a
Leukoesterase	Negative	n/a	n/a	n/a

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings
pH	7.35 – 7.45	n/a	n/a	n/a
PaO2	80 - 100	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	95 - 100	n/a	n/a	n/a

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

Test	Normal Range	Value on Admission	Today's Value	Explanation of Findings

Urine Culture	**negative**	**n/a**	**n/a**	**n/a**
Blood Culture	**negative**	**n/a**	**n/a**	**n/a**
Sputum Culture	**negative**	**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.). Wolters Kluwer.

Diagnostic Imaging

All Other Diagnostic Tests (5 points): Electrocardiogram

Diagnostic Test Correlation (5 points): An electrocardiogram (ECG or EKG) was performed to help confirm the diagnosis of diabetic ketoacidosis as tachycardia is a symptom (Hinkle & Cheever, 2018). Upon arrival to the emergency department, the patient was also complaining of chest tightness. The electrocardiogram was performed to help rule out any cardiac related events. An electrocardiogram can show any electrical problems within the heart (Hinkle & Cheever, 2018). The electrocardiogram shows a “picture” of when and how the heart is firing.

Diagnostic Test Reference (1) (APA):

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

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

Home Medications (5 required)

Brand/Generic	Acetaminophen/ Tylenol	Calcium Carbonate/ TUMS	Melatonin	Polyethylene Glycol/ Miralax	Glucose Chewable Tablet
Dose	650mg	1,000mg	6mg	17g	16g (4 tablets)
Frequency	Q4H	Q8H PRN	Nightly PRN	2x Daily	PRN
Route	Oral	Oral	Oral	Oral	Oral
Classification	analgesic	antacid	hormone	Osmotic laxative	Simple sugar
Mechanism of Action	In the CNS the COX pathway is inhibited.	Reduces the acid amount that reaches the duodenum. The acid present in the stomach is neutralized.	Causes drowsiness to regulate the sleep-wake cycle	Draws water to the colon to soften stool	The incretin hormones in the gut are stimulated to promote insulin production.
Reason Client Taking	The patient experiences abdominal pain from uncontrolled type 1 diabetes.	The patient has heartburn and indigestion.	The patient has problems with sleeping.	The patient experiences constipation at times.	The patient can experience hypoglycemia.
Contraindications (2)	Hypersensitivity, severe hepatic impairment	Decreased kidney function, dehydration	Pregnancy, autoimmune conditions	Toxic megacolon, hypocalcemia	Heart disease, asthma
Side Effects/Adverse Reactions (2)	Hypomagnesemia, hypokalemia	Weight loss, mood changes	Headache, dizziness	Flatulence, bloating	Confusion, fever
Nursing Considerations (2)	Make sure the patient does not have severe hepatic impairment before administering, Do not administer more than 400mg a day	Check to make sure the patient is not taking the medications within 1-2 hours of taking other medications, Ask the patient what other nonprescription drugs they are taking	Ensure the patient is not intoxicated before administering, Check to make sure the patient does not have an autoimmune disease	Perform an abdominal assessment, Assess the patient for any signs of dehydration	Monitor blood glucose to evaluate effectiveness, have insulin nearby in case of an emergency

Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor AST/ALT, BUN, and creatinine	Monitor serum calcium, assess how long the patient has been taking – not meant for long term use.	Monitor hormone panel, lipid panel, and blood glucose	Ask patient when their last bowel movement was, Listen to bowel sounds	Assess patient's orientation for baseline, monitor patient's blood glucose
Client Teaching needs (2)	Educate patient on signs of hepatoxicity, Advise patient to avoid using any other OTC medication	Medication can be taken with or without food, chew the tablet completely	Instruct patient to take at bedtime as directed, Caution patient to avoid driving	Instruct the patient to tell their doctor if they have a change in bowel habits, Report any nausea/vomiting with abdominal pain	Instruct patient to take tablet by mouth with a glass of water, ensure the patient knows to chew the tablet completely before swallowing

Hospital Medications (5 required)

Brand/Generic	Ondansetron/ Zofran	Enoxaparin/ Lovenox	Magnesium hydroxide/ Milk of Magnesium	Insulin lispro/ Humalog	Insulin glargine/ Lantus
Dose	4mg	40mg	30mL	3-15 units	10 units
Frequency	Q6H	Daily	Daily	3x with meals	Daily
Route	Oral	SubQ	Oral	SubQ	SubQ
Classification	Antiemetic	anticoagulant	Laxative	Insulin	Insulin
Mechanism of Action	Blocks the action of serotonin	Accelerates antithrombin III activity	Draws water into intestines to help intestinal movement	Stimulate glucose uptake by skeletal muscle and fat and inhibits hepatic glucose production	Promotes sugar movement from blood to body tissues and inhibits hepatic glucose production
Reason Client Taking	The patient reported she was having nausea.	The patient is at risk for venous thromboembolism.	The patient experiences constipation.	The patient has type 1 diabetes mellitus.	The patient has type 1 diabetes mellitus.
Contraindications (2)	Congenital long QT syndrome,	Active bleeding, thrombocytopenia	Ulcerative colitis,	Hypokalemia, hypoglycemia	Hypoglycemia, liver problems

	hypersensitivity		abdominal pain		
Side Effects/Adverse Reactions (2)	Intestinal obstruction, hypotension	Hemorrhage, pulmonary edema	Confusion, laxative dependency	Hunger, sweating	Irritability, weakness
Nursing Considerations (2)	Place tablet on tongue, monitor for signs of serotonin syndrome	Monitor for bleeding, Protamine sulfate should be on hand in case of an overdose.	Make sure the patient is exercising properly, Administer medication with a lot of water and shake.	Check patients' blood glucose before administering, determine when to administer the insulin	Rotate the vial before drawing it up, rotate injection sites
Key Nursing Assessment(s)/Lab(s) Prior to Administration	Monitor for adverse reactions, monitor for electrolyte imbalances	Monitor INR, potassium levels, CBC/platelet count	Monitor cardiac status, monitor electrolyte levels	Establish the patient's baseline, assess BP, pulse, RR	Assess patient's blood glucose level before administering, do not change dose without discussing with provider first
Client Teaching needs (2)	Instruct patient to report signs of hypersensitivity, instruct patient to seek care if the symptoms worsen	Educate patient to rotate injection sites, Tell patient to not rub injection site after administering	Educate patient on laxative dependency, Educate patient to increase their daily intake of fluids.	Instruct patient to not use two doses at one time, Use medication before or after meals	Instruct patient to use as directed, never use when there are symptoms of hypoglycemia

Medications Reference (1) (APA):

Jones & Bartlett Learning. (2020). 2020 *Nurse's Drug Handbook*. Burlington, MA

Assessment

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

GENERAL: **Alertness:** **Orientation:** **Distress:** **Overall appearance:**	The patient is alert and orientated to person, time, and place. She was well groomed and appeared to be in no apparent distress as she was sleeping before the assessment was performed.

INTEGUMENTARY: **Skin color:** **Character:** **Temperature:** **Turgor:** **Rashes:** **Bruises:** **Wounds:** . **Braden Score:** 21 **Drains present: Y☐ N ☒** **Type:** n/a	The patient's skin is warm, dry, and appropriate for race. Rapid recoil for skin turgor noted. There are no rashes, bruises, or wounds present upon inspection. There are no drains present. The patient's Braden score is 21.
HEENT: **Head/Neck:** **Ears:** **Eyes:** **Nose:** **Teeth:**	Head and neck are symmetrical. Thyroid is nonpalpable with no nodules noted. Trachea is midline without deviation. Carotid pulses 2+ and palpable. There is no apparent lymphadenopathy of the head or neck noted. Auricles are moist and pink with no lesions bilaterally. The sclera is normal bilaterally. Bilateral clear corneas. Conjunctivae are pink bilaterally. Lids are pink and moist with no discharge noted. EOMs are intact bilaterally. Bilateral PERRLA. Red light reflex present bilaterally. The septum is midline. Turbinate are pink and moist bilaterally with no bleeding/polyps present. Bilateral nontender frontal sinuses. The patient had good overall dentition. .
CARDIOVASCULAR: **Heart sounds:** **S1, S2, S3, S4, murmur etc.** **Cardiac rhythm (if applicable):** **Peripheral Pulses:** Normal sinus rhythm **Capillary refill:** **Neck Vein Distention: Y ☐ N ☒** **Edema Y ☐ N ☒** **Location of Edema:** N/a	Clear S1 and S2 heart sounds with no gallops, rubs, or murmurs present. The PMI is palpable at the fifth intercostal space. The patient was in normal sinus rhythm. Capillary refill is less than three seconds. There is no edema present.
RESPIRATORY: **Accessory muscle use: Y☐ N ☒** **Breath Sounds: Location, character** **ET Tube:** N/a **Size of tube:** n/a **Placement (cm to lip):** n/a **Respiration rate:** n/a **FiO2:** n/a	Normal rate and rhythm of respirations. No accessory muscle use noted. Respirations are non-labored and symmetrical. Lung sounds clear bilaterally throughout. There are no crackles, rhonchi, or wheezed noted.

Total volume (TV): n/a **PEEP:** n/a **VAP prevention measures:** n/a	
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 is on a diabetic diet but does not follow it at home. She weighs 148 pounds and is 5'2". Upon auscultation, the bowel sounds are normoactive in all four quadrants. The patients last bowel movement was 3/29/2022. Upon inspection, the abdomen is non-distended. Upon palpation, the abdomen is soft and non-tender. No CVA tenderness bilaterally. There were no incisions, scars, or wounds present.
GENITOURINARY: **Color:** Yellow **Character:** Clear **Quantity of urine:** 1,000mL **Pain with urination: Y ☐ N ☒** **Dialysis: Y ☐ N ☒** **Inspection of genitals:** Clean with no lesions. **Catheter: Y ☐ N ☒** **Type:** n/a **Size:** n/a **CAUTI prevention measures:** None	
MUSCULOSKELETAL: **Neurovascular status:** **ROM:** **Supportive devices:** **Strength:** **ADL Assistance: Y☐ N ☒** **Fall Risk: Y ☐ N☒** **Fall Score: 4** **Activity/Mobility Status:** **Independent (up ad lib) ☐X**	The patient can ambulate as tolerated with no assistive devices. Full ROM bilaterally in upper and lower extremities. Strength equal bilaterally in upper and lower extremities noted.

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:** **Mental Status:** **Speech:** **Sensory:** **LOC:**	The patient is alert and orientated to person, place, time, and event. Speech is clear and appropriate for age. There are no sensory deficient noted.
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 reported she copes with situations by listening to music to relax. Her developmental level is appropriate for age. When asked what religion means to her, she reported she does not practice any religion. Her support system is her sister.

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

Time	Pulse	B/P	Resp Rate	Temp	Oxygen
1000	80	123/78	18	97.9	100% RA
1300	86	124/92	18	97.7	99% RA

Vital Sign Trends/Correlation: The patient's vital signs remained stable and within normal limits throughout the shift.

Pain Assessment, 2 sets (2 points)

Time	Scale	Location	Severity	Characteristics	Interventions
1000	0-10	N/a	The patient reported no pain.	None	N/a
1300	0-10	N/a	The patient reported no pain.	None	N/a

IV Assessment (2 Points)

IV Assessment	**Fluid Type/Rate or Saline Lock**
Size of IV: 20 gauge **Location of IV:** Right basilic vein **Date on IV:** 3/30/22 **Patency of IV:** **Signs of erythema, drainage, etc.:** There are no signs of erythema or drainage noted. **IV dressing assessment:** Clean, dry, and intact.	100 mL/hr 0.9% sodium chloride with potassium
Other Lines (PICC, Port, central line, etc.)	
Type: **Size:** **Location:** **Date of insertion:** **Patency:** **Signs of erythema, drainage, etc.:** **Dressing assessment:** **Date on dressing:** **CUROS caps in place: Y ☐ N ☐** **CLABSI prevention measures:**	The patient had no other lines.

Intake and Output (2 points)

Intake (in mL)	**Output (in mL)**
0.9% sodium chloride with potassium chloride 650mL Chocolate milk 240mL Water 120mL	1000mL urine

Nursing Care

Summary of Care (2 points)

Overview of care: The patient was admitted for Diabetic Ketoacidosis. The patient was treated appropriately with an insulin drip and D5W. The doctor was discussing the intention of

discharging the patient as she was a 30-day readmission for the same diagnosis. The patient does not follow diabetic treatment at home and has declined home care to help manage her type 1 diabetes mellitus.

Procedures/testing done: During admission on the unit, no procedures or tests were completed. Upon arrival to the Emergency Department, an EKG was performed showing tachycardia, which is consistent with diabetic ketoacidosis.

Complaints/Issues: During the shift, the patient only complained of being tired and wanting to discharge home.

Vital signs (stable/unstable): The patient's vital signs remained stable during the shift.

Tolerating diet, activity, etc.: The patient was NPO status upon admission but began normal diabetic diet during the morning part of the shift. She is tolerating activities well and is up as tolerated.

Physician notifications: There were no notifications during the shift.

Future plans for client: The patient will discharge home and follow up with her primary care physician on 4/7 to discuss her admission and follow up treatment.

Discharge Planning (2 points)

Discharge location: The patient will discharge home to her mom, grandmother, and uncle.

Home health needs (if applicable): The patient does not require any home health needs.

Equipment needs (if applicable): The patient has no equipment needs.

Follow up plan: The patient will see her primary care physician to discuss how to proceed to keep these DKA episodes from reoccurring due to her noncompliance with diabetic treatment.

Education needs: The patient needs education on diabetic treatment. The patient needs to be educated on the health risks she is putting herself at for being noncompliant with her at home diabetes management. She also needs education on diabetic diet as she eats and drinks whatever she is wanting that day.

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 • Listed in order by priority – highest priority to lowest priority pertinent to this client	**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 to plan.
1. Risk for unstable blood glucose level related to lack of adherence to diabetes mellitus management as evidenced by pt reported she is not taking medications as prescribed.	The patient was diagnosed with tyle 1 diabetes mellitus when she was 13. She has never managed her diabetic treatment. She also has a history of DKA.	1.Assess for hyperglycemia. 2. Assess the patient's adeptness in self-monitoring glucose.	**1.** The patient will have a normal diabetic glucose level and will verbalize the understanding of self-monitoring glucose.	**1.** The patient blood glucose was assessed. 2. The patient's adeptness was assessed and she will monitor her own glucose at home.
2. Risk for infection related to high glucose	The patient is at risk for infection as her body is	**1.** Assess for signs of infection.	**1.** The patient will have no signs of infections or ulcers.	**1.** The patient was assessed for infection and showed no signs

levels as evidenced by ketoacidosis.	acidotic.	2.Observe patient for any ulcers.		of infection. 2. The patient allowed the nurse to observe for any ulcers.
3. Risk for electrolyte imbalance related to dehydration as evidenced by increased urination.	The patient is at risk because of increased urination. Increased urination is letting out too many electrolytes.	**1.** Monitor for signs of dehydration. **2** Monitor intake and output.	**1.** The patient will stay hydrated and will have a decrease in urination.	1. The patient showed no signs of dehydration. 2. The patient's intake and output were recorded. Patient had sufficient output.
4. Risk for fluid volume deficient related to decreased intake of fluids as evidenced by patient's fluid intake is insufficient.	The patient presented to the emergency department being dehydrated.	**1**. Assess for skin turgor. 2. Monitor hourly intake/output**.**	**1.** The patient will have good skin turgor and sufficient intake and output.	**1.** The patient tolerated having her skin turgor assessed. She showed rapid recoil. 2. The patient allowed her intake and output to be recorded. She is displaying good signs of urination.
5. Deficient knowledge related to unfamiliarity with risk factors as evidenced by inaccurate follow through of instructions.	The patient does not realize the risks. She is aware she has type 1 diabetes mellitus but does not abide by the diabetic treatment as she does not take her medications as prescribed.	1. Assess patient's readiness to learn. 2.Explain that regular insulin should be injected 30 minutes before meals.	**1.** The patient will participate in learning and verbalize the understanding of the risk factors that come with not following up with diabetic treatment. The patient will understand when to administer insulin properly.	1. The patient was eager and ready to learn. She is tired of these DKA episodes happening. 2. The patient verbalized the understanding of when to administer insulin.

Other References (APA):

Martin, P. (2022, March 18). *4 diabetic ketoacidosis and HHNS nursing care plans*. Nurseslabs. Retrieved April 2, 2022, from https://nurseslabs.com/diabetic-ketoacidosis-nursing-care-plans/

Swearingen, P. L., & Wright, J. D. (2019). All-in-one nursing care planning resource: medical-surgical, pediatric, maternity, and psychiatric-mental health. St. Louis, MO: Elsevier.

Concept Map (20 Points):

Subjective Data

The patient reported abdominal pain and chest tightness upon arrival to the emergency department.

Objective Data

Pulse: 80 bpm
BP: 123/78
RR: 18
Temp: 97.9F
O2: 100% RA
WBC: 3.5
Neutrophils: 44.0
Lymphocytes: 46.0
Na-: 131
K+: 3.3
Co2: 7
Glucose: 457
BUN:5
Calcium: 8.3

Client Information

Date of Admission: 3/28/2022
T.L.
Female
19 years old
Diabetic Ketoacidosis
Single

Nursing Diagnosis/Outcomes

Risk for unstable blood glucose level related to lack of adherence to diabetes mellitus management as evidenced by pt reported she is not taking medications as prescribed.
The patient will have a normal diabetic glucose level and will verbalize the understanding of self-monitoring glucose.
2. Risk for infection related to high glucose levels as evidenced by ketoacidosis
a. The patient will have no signs of infections or ulcers.
3. Risk for electrolyte imbalance related to dehydration as evidenced by increased urination.
a. The patient will stay hydrated and will have a decrease in urination.
4. Risk for fluid volume deficient related to decreased intake of fluids as evidenced by patient's fluid intake is insufficient
a. The patient will have good skin turgor and sufficient intake and output.
5. Deficient knowledge related to unfamiliarity with risk factors as evidenced by inaccurate follow through of instructions.
a. The patient will participate in learning and verbalize the understanding of the risk factors that come with not following up with diabetic treatment. The patient will understand when to administer insulin properly.

Nursing Interventions

Assess for hyperglycemia.
Assess the patient's adeptness in self-monitoring glucose.
Assess for signs of infection.
Observe for signs of ulcers.
Monitor for signs of dehydration.
Monitor intake and output.
Assess skin turgor
Monitor hourly intake/output
Assess patient's readiness to learn.
Explain that regular insulin should be given 30 minutes before meals.