

N433 Care Plan #1

Lakeview College of Nursing

Jillian Kurtz

**Demographics (3 points)**

|  |                                  |   |   |
|--|----------------------------------|---|---|
| <b>Date of Admission</b><br>09/27/2021 | <b>Patient Initials</b><br>R.F.  | <b>Age (in years &amp; months)</b><br>7 years 1 month | <b>Gender</b><br>Female   |
| <b>Code Status</b><br>Full             | <b>Weight (in kg)</b><br>25.7 kg | <b>BMI</b><br>14.96                                   | <b>Allergies/Sensitivities (include reactions)</b><br>Nystatin-Rash |

**Medical History (5 Points)**

**Past Medical History:** The patient's past history was a diagnosis of a body mass index 95-99% and history of constipation.

**Illnesses:** The patient has no past illnesses.

**Hospitalizations:** The patient has no past hospitalization.

**Past Surgical History:** Parents state the patient has no past surgical history.

**Immunizations:** Parents state the patient is up to date on immunizations.

**Birth History:** Patient was born at full term.

**Complications (if any):** N/A

**Assistive Devices:** Patient does not use any assistive devices.

**Living Situation:** Patient lives a home with her parents and siblings.

**Admission Assessment**

**Chief Complaint (2 points):** The chief complaint was increased tiredness, increase in thirst, increase in urination, and excessive weight loss.

**Other Co-Existing Conditions (if any):** N/A

**Pertinent Events during this admission/hospitalization (1 points):** Patient was admitted into PICU before getting admitted to the pediatric unit.

**History of present Illness (10 points):** On September 27<sup>th</sup>, 2021 a 7-year-old Caucasian female was admitted to Carle emergency room for increased tiredness, increase in thirst, increase in urination, and weight loss. The mother brought her into the emergency department and provided the child's history, and states that she has had increased tired, thirst, and urination and a weight loss of 7 pounds in the past week. Patient's labs showed a glucose of 449 and ketones in her urine. Patient states she wasn't in any pain. Patient is normally healthy child, with no past hospitalizations, illnesses, or surgical history.

### **Primary Diagnosis**

**Primary Diagnosis on Admission (2 points):** Diabetic Ketoacidosis

**Secondary Diagnosis (if applicable):** N/A

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

Ketones are strong acids that accumulate in the blood, alter pH, and cause metabolic acidosis, such as diabetic ketoacidosis. The diagnostic criteria for diabetic ketoacidosis includes a low glucose level greater than or equal to 250 mg/dL, arterial pH lower than 7.3, serum bicarbonate lower than 15 mEq/L, and ketonuria and ketonemia (Capriotti, 2020). The patient presented to the emergency department with a blood glucose of 449 and her urine analysis showed ketones. The most common causes include new onset of diabetes, noncompliance with insulin treatment, the stress of infection, myocardial infarction, or alcohol abuse (Capriotti, 2020). Individuals with diabetic ketoacidosis often present with polyuria, polydipsia, polyphagia, weakness, abdominal pain, Kussmaul's respirations, nausea, and vomiting (Capriotti, 2020). The patient experienced polyuria, and polydipsia related to a new onset of diabetes. The patient may appear lethargic, stuporous, or comatose. Patient may also present with signs of dehydration such as dry mucous membranes, tachycardia, and hypotension. The patient usually has ketone breath, ketonuria, and

ketone body order (Capriotti, 2020). Patients who are alerted and oriented who present to the emergency department with DKA are often treated with fluids and discharged after stable, but other severe cases of diabetic ketoacidosis should be admitted to the intensive care unit. The highest risk of diabetic ketoacidosis is in patients with type 1 diabetes and individuals who frequently miss insulin doses, but sometimes DKA can be the first sign you have diabetes (*Diabetic Ketoacidosis - Symptoms and Causes*, 2020). Labs are essential to monitor in a patient with DKA. Blood urea nitrogen (BUN), creatinine, sodium, potassium, and bicarbonate levels are monitored frequently, along with urine to check for ketones and glucose (Capriotti, 2020). Diabetic ketoacidosis is often treated with fluids and electrolytes, such as sodium, potassium, chloride and insulin. Fluid replacement is essential to counteract the dehydration and hyperosmolarity caused by extreme hyperglycemia. Insulin is administered until blood glucose remains under 150 mg/dL (Capriotti, 2020). Potassium supplementation is essential for treatment in DKA because as insulin is administered and acidosis is diminished, potassium moves back into the cellular compartment, which reveals the true blood levels of potassium (Capriotti, 2020). My patient was treated with potassium chloride, and she also was receiving insulin throughout the day when she needed it. Potassium is an essential electrolyte to monitor because it can cause cardiac changes such as peaked T wave and a prominent u wave. Lastly, if a patient presents with cerebral edema, which is a severe complication of DKA, the clinician needs to be careful not to overhydrate the client and slowly decrease blood glucose levels during treatment, so the condition does not worsen.

**Pathophysiology References (2) (APA):**

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

*Diabetic ketoacidosis - Symptoms and causes.* (2020, November 11). Mayo Clinic.

<https://www.mayoclinic.org/diseases-conditions/diabetic-ketoacidosis/symptoms-causes/syc-20371551>

### Active Orders (2 points)

| Order(s)  | Comments/Results/Completion  |
|---|--|
| <b>Activity:</b> Ambulate as tolerated  | Patient ambulates to the bathroom independently.   |
| <b>Diet/Nutrition:</b> Regular diet, less than 20 grams of carbohydrates per meal | Patient has diet restrictions due to new onset of type 1 diabetes.   |
| <b>Frequent Assessments:</b> Glucose ACHS, accurate I&O, Neuro checks Q4          | We want to monitor the patient for hyperglycemia and the number of ketones present in the patient's urine. |
| <b>Labs/Diagnostic Tests:</b> BMP, Beta-Hydroxybutyrate                           | Results were not in before leaving clinical.   |
| <b>Treatments:</b> Novolog, Lantus, MiraLAX                                       | N/A  |
| <b>Other:</b> N/A   | N/A  |
| New Order(s) for Clinical Day   |  |
| Order(s)  | Comments/Results/Completion  |
| Basic Metabolic Panel   | Patient had blood drawn but results were not completed before leaving clinical.                            |
| Beta- Hydroxybutyrate   | Patient had blood drawn but results were not completed leaving clinical.                                   |

|  |  |
|--|--|
|  |  |
|--|--|

**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 (specific to the age of the child) | Admission or Prior Value | Today's Value   | Reason for Abnormal Value   |
|--------------------|---|--------------------------|---|---|
| <b>RBC</b>         | 3.90-4.96                                       | 4.92                     | *Patient's blood draw was not resulted before leaving clinical. |   |
| <b>Hgb</b>         | 10.6-13.2                                       | 14.3                     | N/A   | Elevated hemoglobin can be caused by dehydration in DKA (Capriotti, 2020).                                  |
| <b>Hct</b>         | 32.4-39.5                                       | 40.8                     | N/A   | Elevated hematocrit levels are as a result of dehydration (Capriotti, 2020).                                |
| <b>Platelets</b>   | 199-367   | 375                      | N/A   | High glucose counts enhance the levels of platelets in patients with DKA (Capriotti, 2020).                 |
| <b>WBC</b>         | 4.27-11.40                                      | 14.35                    | N/A   | Elevated WBC count can be linked to insulin deficiency, dehydration, and stress in DKA (Capriotti, 2020).   |
| <b>Neutrophils</b> | 1.64-7.87                                       | 10.34                    | N/A   | High neutrophil count is a result from lack of insulin production in the bone marrow (Capriotti, 2020).     |
| <b>Lymphocytes</b> | 1.16-4.28                                       | 22.4                     | N/A   | Elevated lymphocytes can be linked to insulin deficiency, dehydration, and stress in DKA (Capriotti, 2020). |
| <b>Monocytes</b>   | 0.19-0.81                                       | 5.0                      | N/A   | The patient could still be recovering from a past acute infection (Capriotti, 2020).                        |
| <b>Eosinophils</b> | 0.03-0.47                                       | 0.09                     | N/A   |   |

|                  |           |      |     |  |
|------------------|-----------|------|-----|--|
|                  |           |      |     |  |
| <b>Basophils</b> | 0.01-0.05 | 0.06 | N/A |  |
| <b>Bands</b>     | 0.2-1.6   | 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 or Prior Value | Today's Value | Reason For Abnormal  |
|----------------------|------------------|--------------------------|---------------|--|
| <b>Na-</b>           | <b>136-145</b>   | <b>133</b>               | 138           | Sodium levels are low in DKA because of the osmotic shift of fluid (Capriotti, 2020).                  |
| <b>K+</b>            | <b>3.5-5.1</b>   | 3.5                      | 4.6           |  |
| <b>Cl-</b>           | <b>98-107</b>    | 99                       | 103           |  |
| <b>Glucose</b>       | <b>60-99</b>     | <b>449</b>               | <b>163</b>    | Glucose cannot get into the body's cells, so it builds up causing increased glucose (Capriotti, 2020). |
| <b>BUN</b>           | <b>7-18</b>      | 9                        | 9             |  |
| <b>Creatinine</b>    | <b>0.55-1.02</b> | 0.65                     | 0.55          |  |
| <b>Albumin</b>       | <b>3.4-5.0</b>   | 3.9                      | N/A           |  |
| <b>Total Protein</b> | <b>6.4-8.2</b>   | 8.2                      | N/A           |  |
| <b>Calcium</b>       | <b>8.5-10.1</b>  | 9.8                      | 10.1          |  |
| <b>Bilirubin</b>     | <b>0.2-1.0</b>   | 0.7                      | N/A           |  |
| <b>Alk Phos</b>      | <b>9-500</b>     | 376                      | N/A           |  |
| <b>AST</b>           | <b>5-34</b>      | 21                       | N/A           |  |
| <b>ALT</b>           | <b>0-55</b>      | 15                       | N/A           |  |
| <b>Amylase</b>       | <b>25-125</b>    | 40                       | N/A           |  |

|               |             |    |     |  |
|---------------|-------------|----|-----|--|
| <b>Lipase</b> | <b>8-78</b> | 11 | 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               | Admission or Prior Value | Today's Value | Reason for Abnormal                   |
|----------------|----------------------------|--------------------------|---------------|---------------------------------------|
| <b>ESR</b>     | 0-10                       | N/A                      | N/A           | *No labs were taken for this patient. |
| <b>CRP</b>     | <10                        | N/A                      | N/A           |                                       |
| <b>Hgb A1c</b> | Less than or equal to 7.5% | N/A                      | N/A           |                                       |
| <b>TSH</b>     | 0.45-4.5                   | N/A                      | N/A           |                                       |

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

| Lab Test                   | Normal Range       | Admission or Prior Value | Today's Value  | Reason for Abnormal   |
|----------------------------|--------------------|--------------------------|----------------|---|
| <b>Color &amp; Clarity</b> | Pale, yellow/clear | Yellow, clear            | Straw, clear   |   |
| <b>pH</b>                  | 5.0-8.0            | 5.0                      | 6.0            |   |
| <b>Specific Gravity</b>    | 1.005-1.030        | N/A                      | 1.015          |   |
| <b>Glucose</b>             | Negative           | <b>1000</b>              | <b>1030</b>    | High glucose in the urine is the result of high blood sugar levels (Capriotti, 2020).   |
| <b>Protein</b>             | Negative           | <b>30+</b>               | Negative       | When the kidneys are not working effectively and as they should, protein can leak through the filters and into the urine (Capriotti, 2020). |
| <b>Ketones</b>             | Negative           | <b>Large +++</b>         | <b>Small +</b> | When cells don't get enough glucose, the body burns fat or energy instead producing ketones (Capriotti, 2020).                              |
| <b>WBC</b>                 | 0-5                | Negative                 | Negative       |   |

|                      |          |     |          |  |
|----------------------|----------|-----|----------|--|
| <b>RBC</b>           | 0-3      | N/A | Negative |  |
| <b>Leukoesterase</b> | Negative | N/A | Negative |  |

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

| <b>Test</b>                 | <b>Normal Range</b>  | <b>Admission or Prior Value</b> | <b>Today's Value</b> | <b>Explanation of Findings</b>        |
|-----------------------------|----------------------|---------------------------------|----------------------|---------------------------------------|
| <b>Urine Culture</b>        | Negative or positive | N/A                             | N/A                  | *No labs were taken for this patient. |
| <b>Blood Culture</b>        | Negative or positive | N/A                             | N/A                  |                                       |
| <b>Sputum Culture</b>       | Negative or positive | N/A                             | N/A                  |                                       |
| <b>Stool Culture</b>        | Negative or positive | N/A                             | N/A                  |                                       |
| <b>Respiratory ID Panel</b> | Negative or positive | N/A                             | N/A                  |                                       |

**Lab Correlations Reference (1) (APA):**

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Carle Foundation Hospital (2021). Reference page (lab values). Urbana, IL.

**Diagnostic Imaging**

**All Other Diagnostic Tests (5 points):** No diagnostic tests were done for this patient.

**Diagnostic Test Correlation (5 points):**

**Diagnostic Test Reference (1) (APA):**

Capriotti, T. (2020). *Davis advantage for pathophysiology: Introductory concepts and clinical perspectives* (2nd ed.). F.A. Davis Company.

Carle Foundation Hospital (2021). Reference page (lab values). Urbana, IL.

**Current Medications (8 points)**  
**\*\*Complete ALL of your patient's medications\*\***

|                                    |   |  |  |  |
|------------------------------------|---|--|--|--|
| <b>Brand/Generic</b>               | MiraLAX<br>(Polyethylene glycol 3350)   | Novolog<br>(Insulin aspart)  | Lantus<br>(Insulin glargine)   | Novolog<br>(Insulin aspart)  |
| <b>Dose</b>                        | 8.5 grams   | 0.5 units for each 50 for glucose >150   | 12 units   | 1 unit per 20 grams of carbohydrates intake  |
| <b>Frequency</b>                   | As needed   | 3x daily after meals   | Daily  | As needed with meals   |
| <b>Route</b>                       | Oral  | Subcutaneous   | Subcutaneous   | Subcutaneous   |
| <b>Classification</b>              | Osmotic Laxative  | Rapid-acting insulin   | Long-acting insulin  | Rapid-acting insulin   |
| <b>Mechanism of Action</b>         | Draws water into the colon which softens the stool and naturally stimulates the colon to contract, easing bowel movements | Binds to the insulin receptors on muscle and fat cells and lower blood glucose by facilitating the cellular uptake of glucose and simultaneously inhibiting the output of glucose from the liver | Promoting movement of sugar from the blood into body tissues and also stops sugar production in liver, mimics the actions of human insulin | Binds to the insulin receptors on muscle and fat cells and lower blood glucose by facilitating the cellular uptake of glucose and simultaneously inhibiting the output of glucose from the liver |
| <b>Reason Client Taking</b>        | Constipation  | Control high blood sugar   | Improve blood sugar control  | Control high blood sugar   |
| <b>Concentration Available</b>     | 10-20 mg  | N/A  | N/A  | N/A  |
| <b>Safe Dose Range Calculation</b> | 0.5-1.5g/kg/daily   | 0.5-1 unit/kg/day  | 0.2-0.4 units/kg/day   | 0.5-1 unit/kg/day  |
| <b>Maximum 24-hour Dose</b>        | 38.55 g/day   | 25.7 (26) units  | 12 units   | 25.7 (26) units  |
| <b>Contraindications (2)</b>       | Eating disorder (anorexia/bulimia), bowel obstruction   | Hypersensitivity, hypoglycemia   | Hypoglycemia, state of diabetic ketoacidosis   | Hypersensitivity, hypoglycemia   |

|   |  |   |   |   |
|---|--|---|---|---|
| <b>Side Effects/Adverse Reactions (2)</b> | Severe or bloody diarrhea, worsening stomach pain  | Low blood sugar, weight gain  | Weight gain, hypokalemia  | Low blood sugar, weight gain  |
| <b>Nursing Considerations (2)</b>         | Store at room temperature, keep away from moisture and heat  | Store the vial in a refrigerator or room temperature, use within 28 days                  | Check potassium levels, should not be used with liver or kidney disease     | Store the vial in a refrigerator or room temperature, use within 28 days                  |
| <b>Client Teaching needs (2)</b>          | Pour the powder into 4-8 oz of a beverage, call the doctor if you are still constipated after 7 days of taking it in a row | Do not share injection pens or cartridges, do not use NovoLog if you have low blood sugar | Do not inject into a muscle or vein, once per day at the same time each day | Do not share injection pens or cartridges, do not use NovoLog if you have low blood sugar |

**Assessment**

**Physical Exam (18 points)**

|   |  |
|---|--|
| <b>GENERAL:</b><br><b>Alertness:</b><br><b>Orientation:</b><br><b>Distress:</b><br><b>Overall appearance:</b>   | Alert and oriented to time, place, person, and date X4<br>No distress<br>Shy, cooperative, well-groomed, and nourished |
| <b>INTEGUMENTARY:</b><br><b>Skin color:</b><br><b>Character:</b><br><b>Temperature:</b><br><b>Turgor:</b><br><b>Rashes:</b><br><b>Bruises:</b><br><b>Wounds:</b><br><b>Braden Score:</b><br><b>Drains present:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br><b>Type:</b> | White, pink<br>Dry/elastic<br>Warm<br>Elastic Turgor 2+<br>No rashes<br>No bruises<br>No wounds<br>4                   |
| <b>IV Assessment (If applicable to child):</b><br><b>Size of IV:</b><br><b>Location of IV:</b><br><b>Date on IV:</b><br><b>Patency of IV:</b>   | 22 gauge left / 20 gauge right<br>Left and right antecubital<br>09/27<br>IV patient                                    |

|  |  |
|--|--|
| <p><b>Signs of erythema, drainage, etc.:</b><br/> <b>IV dressing assessment:</b><br/> <b>IV Fluid Rate or Saline Lock:</b></p>   | <p>No signs of erythema/drainage<br/>                 No phlebitis/infiltration<br/>                 Potassium chloride 85 mL/hr</p>   |
| <p><b>HEENT:</b><br/> <b>Head/Neck:</b><br/> <b>Ears:</b><br/> <b>Eyes:</b><br/> <b>Nose:</b><br/> <b>Teeth:</b><br/> <b>Thyroid:</b></p>  | <p>Head/neck symmetrical, equal range of motion<br/>                 Tympanic membrane gray/pearly, no discharge<br/>                 Eyes symmetrical, EOMI intact<br/>                 Nose symmetrical, no deviation<br/>                 Gum's pink/moist, good dentition<br/>                 Midline, swallowing with difficulty</p>   |
| <p><b>CARDIOVASCULAR:</b><br/> <b>Heart sounds:</b><br/> <b>S1, S2, S3, S4, murmur etc.</b><br/> <b>Cardiac rhythm (if applicable):</b><br/> <b>Peripheral Pulses:</b><br/> <b>Capillary refill:</b><br/> <b>Neck Vein Distention:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Edema</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Location of Edema:</b></p>  | <p>Heart sounds auscultates S1 and S2 present<br/>                 No murmurs<br/>                 No gallops or rub in S3 and S4<br/>                 Carotid, radial, ulnar, brachial, femoral, popliteal, dorsal pedis, and posterior tibial pulses +2 bilaterally<br/>                 Capillary refill less than 3 seconds</p>  |
| <p><b>RESPIRATORY:</b><br/> <b>Accessory muscle use:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Breath Sounds: Location, character</b></p>   | <p>No crackles or wheezes. Lungs clear posterior and anterior in all lobes.</p>  |
| <p><b>GASTROINTESTINAL:</b><br/> <b>Diet at home:</b><br/> <b>Current diet:</b><br/> <b>Height (in cm):</b><br/> <b>Auscultation Bowel sounds:</b><br/> <b>Last BM:</b><br/> <b>Palpation: Pain, Mass etc.:</b><br/> <b>Inspection:</b><br/>         <b>Distention:</b><br/>         <b>Incisions:</b><br/>         <b>Scars:</b><br/>         <b>Drains:</b><br/>         <b>Wounds:</b><br/> <b>Ostomy:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Nasogastric:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>         <b>Size:</b><br/> <b>Feeding tubes/PEG tube</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/>         <b>Type:</b></p> | <p>Regular diet at home<br/>                 Regular diet, less than 20 grams of carbohydrates<br/>                 131 cm<br/>                 Bowel sounds active in all four quadrants<br/>                 9/24<br/>                 No masses/palpations<br/>                 No distention<br/>                 No incisions<br/>                 No scars<br/>                 No drains<br/>                 No wounds</p> |
| <p><b>GENITOURINARY:</b></p>   |  |

|   |  |
|---|--|
| <p><b>Color:</b><br/> <b>Character:</b><br/> <b>Quantity of urine:</b><br/> <b>Pain with urination:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Dialysis:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Inspection of genitals:</b><br/> <b>Catheter:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Type:</b><br/> <b>Size:</b></p>  | <p>Straw<br/>                 Clear<br/>                 500 mL</p> <p>Genitals clean and dry</p>  |
| <p><b>MUSCULOSKELETAL:</b><br/> <b>Neurovascular status:</b><br/> <b>ROM:</b><br/> <b>Supportive devices:</b><br/> <b>Strength:</b><br/> <b>ADL Assistance:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Fall Risk:</b> Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br/> <b>Fall Score:</b><br/> <b>Activity/Mobility Status:</b><br/> <b>Independent (up ad lib)</b> <input type="checkbox"/><br/> <b>Needs assistance with equipment</b> <input type="checkbox"/><br/> <b>Needs support to stand and walk</b> <input type="checkbox"/></p> | <p>Patient states their pain as a 0/10<br/>                 Active range of motion<br/>                 No supportive devices<br/>                 Strength 5/5 bilateral in all extremities bilaterally</p> <p>2</p> <p>Independent (up and lib)</p>  |
| <p><b>NEUROLOGICAL:</b><br/> <b>MAEW:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/> <b>PERLA:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/><br/> <b>Strength Equal:</b> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> <b>if no -</b><br/> <b>Legs</b> <input type="checkbox"/> <b>Arms</b> <input type="checkbox"/> <b>Both</b> <input type="checkbox"/><br/> <b>Orientation:</b><br/> <b>Mental Status:</b><br/> <b>Speech:</b><br/> <b>Sensory:</b><br/> <b>LOC:</b></p>  | <p>Patient is orientated to person, place, time, and date.<br/>                 No dizziness, weakness, or headaches<br/>                 Articulative speech<br/>                 Alert<br/>                 No gross focal neurological deficits</p> |
| <p><b>PSYCHOSOCIAL/CULTURAL:</b><br/> <b>Coping method(s) of caregiver(s):</b><br/> <b>Social needs (transportation, food, medication assistance, home equipment/care):</b><br/> <b>Personal/Family Data (Think about home environment, family structure, and available family support):</b></p>  | <p>Has support by her mom, dad, and grandpa<br/>                 Need assistance checking blood glucose and administering insulin</p> <p>Patient has awesome supportive by all her family members and appeared to be loved and well taken care of.</p> |

**Vital Signs, 2 sets (2.5 points)**

| Time | Pulse | B/P    | Resp Rate | Temp               | Oxygen |
|------|-------|--------|-----------|--------------------|--------|
| 0900 | 106   | 106/57 | 20        | 97.7 F<br>(36.5 C) | 98 %   |

|      |    |   |    |                            |     |
|------|----|---|----|----------------------------|-----|
|      |    | Patient was lying in bed, left arm, automatic |    | (Axillary)                 |     |
| 1120 | 98 | *BP only taken every 8 hours                  | 20 | 97.7 F (36.5 C) (Axillary) | 99% |

**Vital Sign Trends:** Vital signs remained stable through the 6 hours at clinical.

**Normal Vital Sign Ranges (2.5 points)**  
**\*\*Need to be specific to the age of the child\*\***

|                          |                                      |
|--------------------------|--------------------------------------|
| <b>Pulse Rate</b>        | 75-118                               |
| <b>Blood Pressure</b>    | Systolic: 97-115<br>Diastolic: 57-76 |
| <b>Respiratory Rate</b>  | 18-25                                |
| <b>Temperature</b>       | 36.5-37.5 C                          |
| <b>Oxygen Saturation</b> | 92-100 %                             |

**Normal Vital Sign Range Reference (APA):**

C., & Almali, O. (2018, July 10). *Pediatric Vital Signs Reference Chart* | PedsCases. Peds Cases. <http://www.pedscases.com/pediatric-vital-signs-reference-chart>

**Pain Assessment, 2 sets (2 points)**

| <b>Time</b>  | <b>Scale</b> | <b>Location</b> | <b>Severity</b> | <b>Characteristics</b> | <b>Interventions</b>                |
|--|--------------|-----------------|-----------------|------------------------|-------------------------------------|
| <b>0900</b>  | FACES        | N/A             | 0               | N/A                    | Patient watched movies on her iPad. |
| <b>Evaluation of pain status <i>after</i> intervention</b> | FACES        | N/A             | 0               | N/A                    | Patient watched movies on her iPad. |

**Precipitating factors:** The patient stated she was in no pain.  
**Physiological/behavioral signs:** The patient stated she was in no pain.

**Intake and Output (1 points)**

| Intake (in mL) | Output (in mL) |
|----------------|----------------|
| 221.5 mL-IV    | 500 mL-urine   |

**Developmental Assessment (6 points)**

**\*Be sure to highlight the achievements of any milestone if noted in your child. Be sure to highlight any use of diversional activity if utilized during clinical. There should be a minimum of 3 descriptors under each heading\***

**Age Appropriate Growth & Development Milestones**

1. Children grow an average of 6 to 7 cm per year, increasing their height by at least 1 foot (Ricci, 2021).
2. Children increase their weight by 3 to 3.5 kg per year (Ricci, 2021).
3. Brain growth is complete by the time the child is 10 years of age (Ricci, 2021).

**Age-Appropriate Diversional Activities**

1. School-age children enjoy riding a two-wheeled bike (Ricci, 2021).
2. School-age children enjoy jumping roping and dance (Ricci, 2021).
3. Coordination improves in school-age children, so they also enjoy skating (Ricci, 2021).

**Psychosocial Development:**

**Which of Erikson’s stages does this child fit?**

- This child fits in Erikson’s stage of industry vs. inferiority (Ricci, 2021).

**What behaviors would you expect?**

- The child is busy learning, achieving, and exploring. The child becomes more independent and focuses on things other than family such as television, video games, and their peers influence them (Ricci, 2021).

**What did you observe?**

- I observed the patient constantly on her iPad watching television and movies.

**Cognitive Development:**

**Which stage does this child fit, using Piaget as a reference?**

- This child fits into Piaget's stage of cognitive development. The period of concrete operational thoughts (Ricci, 2021).

**What behaviors would you expect?**

- The child is able to coordinate information from different dimensions and see things from another person's perspective. The child can distinguish people in their family and has an interest in collecting things (Ricci, 2021).

**What did you observe?**

- I observed the patient talking about her mom, dad, and grandpa. The patient also had a collection of stuffed animals in her room.

**Vocalization/Vocabulary:**

**Development expected for child's age and any concerns?**

- Language continues to accelerate in the school-age child and their vocabulary expands. Reading and language skills improve, and reading becomes more efficient. They also

develop the ability to think about language and comment on its properties. School- age children use more complex grammatical forms such as plurals and pronouns. This is the time when children may enjoy telling jokes because of their understanding of double meaning on words and sounds. (Ricci, 2021).

**Any concerns regarding growth and development?**

- There were no concerns regarding the child’s growth and development.

**Developmental Assessment Reference (1) (APA):**

Ricci, S.S., Kyle, T., & Carman, S. (2021). Maternity and pediatric nursing (4<sup>th</sup> ed.). Wolters Kluwer.

**Nursing Diagnosis (15 points)**

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

| <p><b>Nursing Diagnosis</b></p> <ul style="list-style-type: none"> <li>• Include full nursing diagnosis with “related to” and “as evidenced by” components</li> </ul> | <p><b>Rational</b></p> <ul style="list-style-type: none"> <li>• Explain why the nursing diagnosis was chosen</li> </ul>                          | <p><b>Intervention (2 per dx)</b></p>   | <p><b>Evaluation</b></p> <ul style="list-style-type: none"> <li>• How did the patient/family respond to the nurse’s actions?</li> <li>• Client response, status of goals and outcomes, modifications to plan.</li> </ul>  |
|---|--|---|---|
| <p>1. Risk for fluid volume deficit related to excessive urination as evidenced by patient going pee frequently.</p>  | <p>I chose this diagnosis because the patient has increased urination and is at risk for fluid volume deficit if she isn’t consuming fluids.</p> | <p>1. Assess skin turgor, mucous membranes, and thirst.<br/><br/>2. Monitor hourly intake and output.</p> | <p>Goal met. Patient was assessed to determine baseline data and use it to compare to any later or abnormal findings. Input and output were recorded through the day to assess if there was an excess or deficit in fluid balance. Patient increased fluid intake throughout the day.</p> |
| <p>2. Risk for infection related to hyperglycemia</p>   | <p>I chose this diagnosis because patients who have high blood</p>   | <p>1. Assess for signs of infection and inflammation.</p>   | <p>Goal met. Patient was assessed for signs of infection. Patient was verbally educated about</p>   |

|   |  |   |  |
|---|--|---|--|
| <p>as evidenced by patient's blood glucose of 449 on admission.</p>   | <p>glucose weaken their immune system.</p>   | <p>2.Encourage proper handwashing techniques.</p>   | <p>proper handwashing techniques and used the demonstration technique to show understanding.</p>   |
| <p>3. Imbalanced Nutrition: less than body requirement related to insufficient insulin as evidenced by increased ketones.</p> | <p>I chose this diagnosis because the patient has large amounts of ketones in her urine.</p>                     | <p>1. Provide a diet consisting of 60% carbohydrates<br/><br/>2. Perform fingerstick glucose testing</p>  | <p>Goal met. Patient's diet can only consist of 20 grams of carbohydrates. Parents demonstrated proper teaching by performing finger sticks to check glucose levels.</p>   |
| <p>4. Deficient knowledge related to new onset of diabetes mellitus as evidenced parents questioning treatment and care.</p>  | <p>I chose this diagnosis because the parents are still learning how to draw up insulin and give injections.</p> | <p>1. Educate the parents on signs and symptoms of hyper/hypoglycemia.<br/><br/>2. Educate the parents on proper way to draw up insulin and how to proper give a subcutaneous injection in the right placement.</p> | <p>Goal met. The parents were given educated on proper insulin management. The verbal and demonstration method was used to demonstrate understanding of insulin administration and signs and symptoms of hypo/hyperglycemia.</p> |

**Other References (APA):**

**Concept Map (20 Points):**

**Subjective Data**

**Nursing Diagnosis/Outcomes**

- **Risk for fluid volume deficit related to excessive urination as evidenced by patient going pee frequently.**
  - o Outcome: Monitor patient's daily input and outcome along with increasing patient's intake intravenous and orally.
- **Risk for infection related to hyperglycemia as evidenced by patient's blood glucose of 449 on admission.**
  - o Outcome: The goal is to monitor the patient for signs of infection especially temperature.
- **Imbalanced Nutrition: less than body requirement related to insufficient insulin as evidenced by increased ketones.**
  - o Outcome: The goal is to monitor the patient's blood glucose and assess the number of ketones in her urine. Patient should only be consuming 20 grams of carbohydrates per meal.
- **Deficient knowledge related to new onset of diabetes mellitus as evidenced parents questioning treatment and care.**
  - o Outcome: Education parents effectively, so they are able to demonstrate proper insulin draw-up and administration before discharge.

**Objective Data**

**Patient Information**

**Nursing Interventions**

1. Monitor vital signs
  2. Check blood sugars and treat with insulin
  3. Administer fluids as recommended
  4. Check electrolytes, specifically potassium
  5. Assess mental status
  6. Monitor for signs of infection
- Patient's chief complaint is increased urination, fluid sum as recommended. loss. Lab: 7-year-old female was diagnosed with diabetic ketoacidosis. Patient has no past surgical history. Patient is up to date on immunizations.  
 Hgb: 10.3  
 Hct: 40  
 Platelets: 143  
 WBC: 10.34  
 Neutrophils: 10.34  
 Lymphocytes: 22.4  
 Monocytes: 5.0  
 Sodium: 133  
 Glucose: 261 449 and 163  
 UA: Glucose: 1000 and 1030  
 UA: Protein: positive 30  
 UA: Ketones: Large and Small

