

****Medical Report: Patient 004-16896****

****1. Patient Information****

* **Patient Unit Stay ID:** 365652 * **Unique Patient ID:** 004-16896 * **Gender:** Male * **Age:** 26 years *
* **Ethnicity:** Caucasian * **Hospital Admit Time:** 2014, 20:14:00 * **Hospital Admit Source:** Emergency Department *
* **Hospital Discharge Time:** 2014, 14:46:00 * **Hospital Discharge Location:** Home * **Hospital Discharge Status:**
Alive * **Unit Type:** Med-Surg ICU * **Unit Admit Time:** 23:25:00 * **Unit Admit Source:** Emergency Department *
* **Unit Discharge Time:** 00:29:00 * **Unit Discharge Location:** Floor * **Unit Discharge Status:** Alive * **Admission
Weight:** 58.96 kg * **Admission Height:** 170.2 cm

****2. History****

The patient was admitted to the hospital via the Emergency Department with a primary diagnosis of Diabetic Ketoacidosis (DKA) and a major diagnosis of Type I Diabetes Mellitus. The history leading to admission is not explicitly detailed in the provided data. Further information would be required to fully describe the patient's medical history prior to this ICU stay. However, the presence of DKA suggests a history of poorly managed Type I diabetes, possibly involving recent illness, infection, or inadequate insulin administration. The patient's symptoms at admission and the events leading up to the DKA episode are unknown based on the provided dataset. More details about the patient's past medical history, family history, and social history are needed for a comprehensive account. This information is crucial for understanding the context of the current presentation and for informed decision-making regarding future care. The absence of this information limits the accuracy and completeness of this report. A thorough review of the patient's chart is necessary to fill these gaps.

****3. Diagnoses****

* **Primary Diagnosis:** endocrine|glucose metabolism|DKA (Diabetic Ketoacidosis) - ICD-9 code: 250.13, E10.1 * **Major
Diagnosis:** endocrine|glucose metabolism|diabetes mellitus|Type I (Type I Diabetes Mellitus) - ICD-9 code: (missing)

The diagnoses indicate a severe acute metabolic complication (DKA) arising from the underlying chronic condition of Type I diabetes. The lack of an ICD-9 code for Type I diabetes requires further clarification. The timing of the diagnoses (105 minutes post-unit admission) suggests they were established soon after admission, indicating the urgency of the situation.

****4. Treatments****

The patient received the following treatments during their ICU stay:

* Subcutaneous dose of regular insulin * Sliding scale administration of insulin * Continuous insulin infusion * Moderate volume resuscitation (normal saline, 150-250 mls/hr) * Acetaminophen (non-narcotic analgesic) * Fluoxetine (Prozac) (SSRI administration) * Ondansetron (serotonin antagonist) * Potassium electrolyte administration * Enoxaparin (low molecular weight heparin for VTE prophylaxis)

These treatments are consistent with the management of DKA and Type I diabetes, addressing fluid balance, hyperglycemia, pain management, nausea, and prevention of blood clots. The specific dosages and durations of these treatments are unavailable.

****5. Vital Trends**** NULL. No vital sign data is available in the provided JSON.

****6. Lab Trends****

The provided lab data includes multiple blood tests (hemogram) and bedside glucose measurements taken at various time points relative to unit admission. Detailed trends require a time-series analysis, which is presented in the visualization section and CSV data below. Initial blood glucose was extremely elevated (502 mg/dL), which is consistent with DKA. The later glucose levels show a declining trend, reflecting the effectiveness of insulin therapy. Electrolyte levels (sodium,

potassium, chloride, bicarbonate) show some fluctuations, suggesting some metabolic instability. Hematological parameters (Hgb, Hct, WBC, platelets, differential counts) are also available and show some abnormalities, reflecting the patient's condition. More information about the time intervals and precise measurement times would aid in a deeper analysis.

****7. Microbiology Tests**** NULL. No microbiology test results are provided.

****8. Physical Examination Results****

* ****Physical Exam Performed:**** Yes (Performed - Structured) * ****GCS Score:**** 15 (4+6+5) * ****Admission Weight:**** 58.96 kg * ****Urine Output:**** 525 ml * ****Total Intake:**** 0 ml * ****Total Net I&O:**** -525 ml * ****Heart Rate (HR):**** 91 bpm * ****Blood Pressure (BP):**** 116/75 mmHg * ****Respiratory Rate:**** 20 breaths per minute * ****Oxygen Saturation (O2 Sat):**** 100% * ****FiO2:**** 21%

The physical examination shows normal vital signs except for the elevated heart rate. The Glasgow Coma Scale (GCS) score indicates normal neurological function. The negative fluid balance suggests dehydration, which is typical in DKA.

****Chart Description****

A time-series line graph should be created to visualize the trends of key lab results over time. The x-axis should represent the time since unit admission (in minutes), and the y-axis will represent the lab value. Separate lines should be used for glucose (mg/dL), potassium (mmol/L), bicarbonate (mmol/L), and sodium (mmol/L). This chart will allow for visual identification of the trends in these parameters during the patient's stay, demonstrating how the treatment impacted the patient's condition. This is particularly informative for assessing the efficacy of the administered treatments in managing the DKA. Furthermore, this allows for immediate observation of the effectiveness of the administered treatments.

****CSV Data****

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```csv TimeOffset (minutes),Glucose (mg/dL),Potassium (mmol/L),Bicarbonate (mmol/L),Sodium (mmol/L)
-122,502,4.2,<5.0,135 -67,NULL,NULL,3.6,NULL 206,NULL,4.7,9.9,138 311,211,NULL,NULL,NULL
471,NULL,4.4,13.6,135 661,NULL,4.0,15.3,136 662,NULL,4,NULL,136 818,177,NULL,NULL,NULL
882,160,NULL,NULL,NULL 948,207,NULL,NULL,NULL 1013,203,NULL,NULL,NULL 1165,352,4.3,17.1,130
1361,176,NULL,NULL,NULL 1636,228,NULL,NULL,NULL 2059,141,NULL,NULL,NULL 2076,150,3.3,20.1,139
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