Patient Medical Report

1. Patient Information

* **Patient Unit Stay ID:** 281132 * **Unique Patient ID:** 003-13187 * **Gender:** Male * **Age:** 65 * **Ethnicity:** Caucasian * **Hospital Admit Time:** 2014-XX-XX 18:10:00 * **Hospital Discharge Time:** 2014-XX-XX 17:45:00 * **Unit Admit Time:** 2014-XX-XX 18:10:00 * **Unit Discharge Time:** 2014-XX-XX 15:48:00 * **Unit Type:** Med-Surg ICU * **Hospital Admit Source:** Emergency Department * **Unit Admit Source:** Emergency Department * **Hospital Discharge Location:** Home * **Unit Discharge Location:** Floor * **Hospital Discharge Status:** Alive * **Unit Discharge Status:** Alive * **Admission Weight:** 86.6 kg * **Discharge Weight:** 83.6 kg * **Admission Height:** 180.3 cm

2. History

NULL (Insufficient information provided in the JSON data to generate a detailed patient history.)

3. Diagnoses

The patient presented with multiple diagnoses during their ICU stay. The diagnoses, listed in order of priority, are:

* **Primary:** Pneumonia (ICD-9 code: 486, J18.9) - This diagnosis was active upon discharge from the unit. * **Major:** Hyponatremia (moderate, 125-135 mEq/dL) (ICD-9 code: E87.1) - This diagnosis was active upon discharge from the unit. * **Other:** Congestive heart failure (ICD-9 code: 428.0, I50.9) - This diagnosis was not active upon discharge. * **Other:** Atrial fibrillation (ICD-9 code: 427.31, I48.0) - This diagnosis was active upon discharge. * **Other:** Motor neuropathy/myopathy, including dystrophy (ICD-9 code: 359.9, G72.9) - This diagnosis was active upon discharge.

Note: Multiple entries for the same diagnosis type exist, suggesting that these conditions may have been present at various times during the stay or represent different levels of severity.

4. Treatments

The patient received the following treatments during their ICU stay:

* **Blood Cultures:** Performed on multiple occasions, suggesting ongoing infection management. * **Urine Cultures:** Performed on multiple occasions, indicating monitoring of urinary tract infections. * **Sputum Cultures:** Performed on multiple occasions, again highlighting infection control strategies. * **Pantoprazole (IV):** Administered for stress ulcer prophylaxis, likely due to the severity of the patient's illness. * **Compression Boots:** Used for VTE prophylaxis (Venous Thromboembolism), a standard precaution for hospitalized patients. * **Coumadin:** Administered as an anticoagulant, potentially to address atrial fibrillation or other clotting issues. * **Digoxin:** Administered for cardiovascular reasons, likely related to atrial fibrillation or heart failure management. This medication was active upon discharge. * **Ceftriaxone:** Administered as a third-generation cephalosporin antibiotic, consistent with the pneumonia diagnosis. This treatment was active upon discharge. * **Azithromycin:** Administered as a macrolide antibiotic, also consistent with the pneumonia diagnosis. * **Aspirin:** Administered as an antiplatelet agent, typical for cardiovascular management. * **Benazepril:** Administered as an ACE inhibitor, commonly used in hypertension management. * **Propafenone:** Administered as a class I antiarrhythmic medication, often prescribed for atrial fibrillation.

5. Vital Trends

NULL (Vital signs data are not included in the provided JSON.)

6. Lab Trends

The lab results show fluctuations in several key parameters throughout the patient's stay. Notable trends include:

* **Sodium (mmol/L):** Initial levels were low (hyponatremia), fluctuating between 121 and 128 mmol/L initially, rising to 137 mmol/L on discharge. This indicates treatment effectiveness. * **Potassium (mmol/L):** Levels fluctuated between 3.5 and 4.2 mmol/L, remaining within the normal range, though close to the lower limit on several occasions. * **BUN (mg/dL):** Shows a slight increase from 10 to 17 mg/dL, suggesting possible renal impairment. * **Creatinine (mg/dL):** Rose significantly from 0.4 to 0.6 mg/dL, supporting the BUN findings and indicating compromised kidney function. This may be related to the patient's overall illness. * **Glucose (mg/dL):** Increased from 76 to 100 mg/dL, requiring attention to glycemic control. * **Complete Blood Count (CBC):** Significant changes in several CBC parameters were observed. WBC count was elevated, reflecting an active infection. Hemoglobin and hematocrit levels were within the normal range, although slightly lower initially. * **PT-INR:** The prothrombin time-international normalized ratio (PT-INR) indicates coagulation status. It ranged from 1.8 to 2.3, reflecting the use of anticoagulants.

7. Microbiology Tests

NULL (Microbiology results are not included in the provided JSON data.)

8. Physical Examination Results

Physical examination findings at 1307 and 1353 minutes post-unit admission revealed:

* **General Appearance:** The patient was described as ill-appearing but not in acute distress, indicating the severity of their condition. * **Neurological Status:** Mental status was assessed as having normal LOC, with an appropriate affect, although orientation was deemed unassessable, potentially due to medication effects or the severity of illness. * **Cardiovascular:** Irregular heart rhythm was documented, consistent with atrial fibrillation. * **Respiratory:** Respiratory rate was 15-23 breaths per minute, suggesting some respiratory distress and indicating the need for oxygen support. The patient was on spontaneous respiration. * **Other:** Weight was noted to have decreased by approximately 2 kg during the ICU stay.

Chart Description

1. **Line Chart: Lab Values Over Time:** This chart would display the time series data of key laboratory values (Sodium, Potassium, BUN, Creatinine, Glucose, Hemoglobin, Hematocrit, Platelets, PT-INR, WBC) on the y-axis, plotted against time (in minutes from unit admit time) on the x-axis. Different lines would represent each lab value, allowing for visual comparison of trends and potential correlations. This visualization would help identify the progression of the patient's condition, the effects of treatment, and potential complications.

2. **Bar Chart: Differential White Blood Cell Count:** A bar chart would display the percentage of each type of white blood cell (-lymphs, -monos, -polys, -eos, -basos, -bands) on the y-axis, with separate bars for each time point the complete blood count (CBC) was performed. This visualization would illustrate changes in the differential white blood cell count (WBC), which could help identify the type of infection and response to treatment.

CSV Data

```csv Time (minutes from unit admit),Sodium (mmol/L),Potassium (mmol/L),BUN (mg/dL),Creatinine (mg/dL),Glucose (mg/dL),Hemoglobin (g/dL),Hematocrit (%),Platelets (K/mcL),PT (sec),PT-INR,WBC (K/mcL)
-193,126,4.2,13,0.4,76,15.1,44.8,228,24.4,2.3,7.4 1012,126,4.1,10,0.4,90,14.6,43.9,214,22.7,2.0,7.3 2384,127,3.9,15,0.5,91,14.4,42.8,213,20.7,1.8,6.4 3844,133,3.6,13,0.4,85,14.4,42.9,253,20.7,1.8,4.8 5311,137,4.0,17,0.4,82,14.4,42.9,213,20.4,1.8,4.8

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