**History**
- Age
- Duration of symptoms
- Severity of symptoms
- Past medical history (e.g., cancer, heart disease, adrenal disease, diabetes, thyroid, dialysis)
- Medications (hypoglycemic agents/diuretics)

**Signs and Symptoms**
- General malaise
- Fatigue
- Isolated or general weakness

**Associated Symptoms (helpful to localize source)**
- Cough, chest pain, headache, dysuria, abdominal pain, mental status changes, rash

**Differential**
- Infection/sepsis
- Medication/drug/toxin reaction
- Myocardial infarction
- Hypothermia/hyperthermia
- Electrolyte imbalance (i.e., hyperkalemia)
- Hypoglycemia/hyperglycemia
- Thyroid disorder
- Stroke/TIA
- Dehydration
- Myasthenia gravis/Guillain-Barre

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**Temperature measurement**
- Blood glucose analysis
- Cardiac monitor
- Establish IV
- Perform 12-Lead ECG
- Perform Cincinnati Prehospital Stroke Scale

**Consider**
- Normal Saline bolus 500ml IV/IO
- **Maximum 2L**

**Consider**
- Sodium Bicarbonate and Calcium Chloride for signs of hyperkalemia
- **Consider**
  - Albuterol for signs of hyperkalemia

**Notify receiving facility.**
- Consider Base Hospital for medical direction

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**Hypothermia/Cold Injury**

**Hyperthermia**

**Sepsis**

**Hypoglycemia**

**Hyperglycemia**

**Chest Pain: STEMI**

**Stroke/CVA/TIA**
Peaked T-waves or bradycardia are signs of hyperkalemia. Increased extracellular potassium reduces myocardial excitability, which results in the depression of both pace making and conducting tissues. Progressively worsening hyperkalemia leads to suppression of impulse generation by the SA node and reduced conduction by the AV node and HIS-Purkinje system, resulting in bradycardia and conduction blocks that ultimately lead to cardiac arrest.

In order to treat hyperkalemia in the prehospital setting, the QRS must be $\geq 0.12$ seconds. If the patient has not yet arrested, be prepared for the patient to do so. Early recognition and treatment is essential to helping reverse this critical condition.

**Pearls**
- Diabetics, geriatric, and female patients often have atypical pain, or only generalized complaints. Suspect cardiac etiology in these patients, and perform a 12-Lead ECG.
- Patients taking potassium supplements or who are on dialysis or with a history of severe renal dysfunction have a higher risk of hyperkalemia.