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**Complete initial evaluation**

Check capillary glucose and serum/urine ketones to confirm hyperglycemia and ketonemia/ketonia.

Start IV fluids: 1.0 L of 0.9% NaCl per hour.

**IV Fluids**

- **Determine volume status**
  - Severe hypovolemia
    - Administer 0.9% NaCl (1.0 L/hour)
  - Mild hypovolemia
    - Evaluate corrected serum Na
  - Cardiogenic shock
    - Hemodynamic monitoring/pressors

**Insulin**

- **IV route**
  - Insulin: Regular 0.1 units/kg as IV bolus
  - Rapid-acting insulin: 0.3 units/kg, then 0.2 units/kg one hour later

- **Uncomplicated DKA-SC route**
  - 0.1 units/kg/hour IV continuous insulin infusion

- **Determine hydration status**
  - Serum Na high:
    - 0.45% NaCl (250 to 500 mL/hour) depending on volume state
  - Serum Na normal:
    - 0.9% NaCl (250 to 500 mL/hour) depending on volume state
  - Serum Na low:
    - If serum glucose does not fall by 50 to 70 mg/dL in first hour, double IV or SC insulin bolus

**Potassium**

- **Establish adequate renal function**
  - Urine output approximately 20 mL/hour
  - **pH < 6.9**
    - Dilute NaHCO₃ (100 mEq) in 450 mL H₂O with 20 mEq KCl
    - Infuse over two hours
  - **pH ≥ 6.9**
    - No NaHCO₃
    - Repeat NaHCO₃ administration every two hours until pH > 7.0

**Assess need for bicarbonate**

- **Serum K is < 3.3 mEq/L**
  - Hold insulin and give 20 to 40 mEq K/hour until K > 3.3 mEq/L

- **Serum K is 3.3 to 5.3 mEq/L**
  - Give 20 to 30 mEq K in each liter of IV fluid to keep serum K between 4 to 5 mEq/L

- **Serum K is > 5.3 mEq/L**
  - Do not give K but check serum K every two hours

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**DKA diagnostic criteria:**

- Serum glucose >250 mg/dL, arterial pH < 7.3, serum bicarbonate <18 mEq/L, and at least moderate ketonuria or ketonemia.
- Normal laboratory values vary; check local lab normal ranges for all electrolytes.

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