### MSHS COVID-19 DKA Protocol

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**Patient with Suspected DKA**

Please order:
- CBC, CMP, Mg, Phos, VBG, Beta-Hydroxybutyrate, c-peptide, HA1C, BCx, troponin, UA, EKG, CXR.

It is important to look for the underlying cause of the DKA to treat in addition to the DKA.

**pH < 7.0, HCO3 < 10, or Pregnant**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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**Glucose check (finger sticks) Q3hours**

Check Electrolytes: BMP, Magnesium, Phos, VBG q4-6h

- **K < 3.2:** Hold insulin until > 3.3.
- **K 3.3-4:** 40 mEq.
- **K 4.1-5:** 20 mEq.

**Magnesium** replete if < 1.5.

**Phos** replete if < 1. **Na:** correct for hyperglycemia.

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### Insulin Drip Protocol

<table>
<thead>
<tr>
<th>Initiation</th>
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<tbody>
<tr>
<td>Glargine 0.1 units/kg SQ</td>
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<tr>
<td>Reg insulin IV gtt: Bolus 0.1 units/kg + 0.1 units/kg/hr</td>
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</tbody>
</table>

Bolus of Plasmalyte 500mL-1L over first hour based on clinical judgement of volume status

**FS > 250**

| Titrate: |
|Δ Glc <50: ↑ gtt 20% |
|Δ Glc 50-75: No Δ |
|Δ Glc >75: ↓ gtt 20% |

Please talk to provider for changes in the insulin drip rate

**FS < 250**

| Titrate: |
|↑ Glc >50: ↑ gtt 20% |
|↓ Glc >50: ↓ gtt 20% |
|Stable: No Δ |

Start D5 ½ NS. Titrate to maintain FS > 200

If D5 at >150 ml/hr switch to D10

**Gap <12, HCO3 >18, pH >7.3**

- <20 hrs since insulin glargine: Glargine 0.1 units/kg
- >20 hrs since insulin glargine: Glargine 0.2 units/kg, stop gtt 1 hr later, Prandial insulin lispro†

Stop fluids and give PO diabetic diet

**Gap >12, HCO3 <18, pH <7.3**

- <20 hrs since insulin glargine: Glargine 0.1 units/kg
- >20 hrs since insulin glargine: Glargine 0.2 units/kg, stop gtt 1 hr later, Prandial insulin lispro†

Continue glargine 0.2 units/kg q24h, Prandial lispro‡

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* If ESRD: Half SQ doses. If on steroids, increase SQ doses by 50%
‡ Prandial lispro=Lispro 0.06 units/kg SC TID AC. Also give sliding scale insulin in addition QAC and QHS

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It is important to frequently reevaluate the patient to assess the need for fluid resuscitation. The balance between fluid resuscitation in DKA vs worsening the respiratory status of the COVID-19 patient is important.

These treatment recommendations are made to meet the pressing needs due to COVID19. Treatment recommendations have not been validated in clinical trials and are based on expert opinion.