Diabetic Ketoacidosis: Assessment and Acute Management

DKA inclusion criteria:
- Glucose >200 mg/dL **AND**
- Ketones (typically ≥2+) **AND**
- Anion gap acidosis (pH≤7.3 or HCO3≤15)

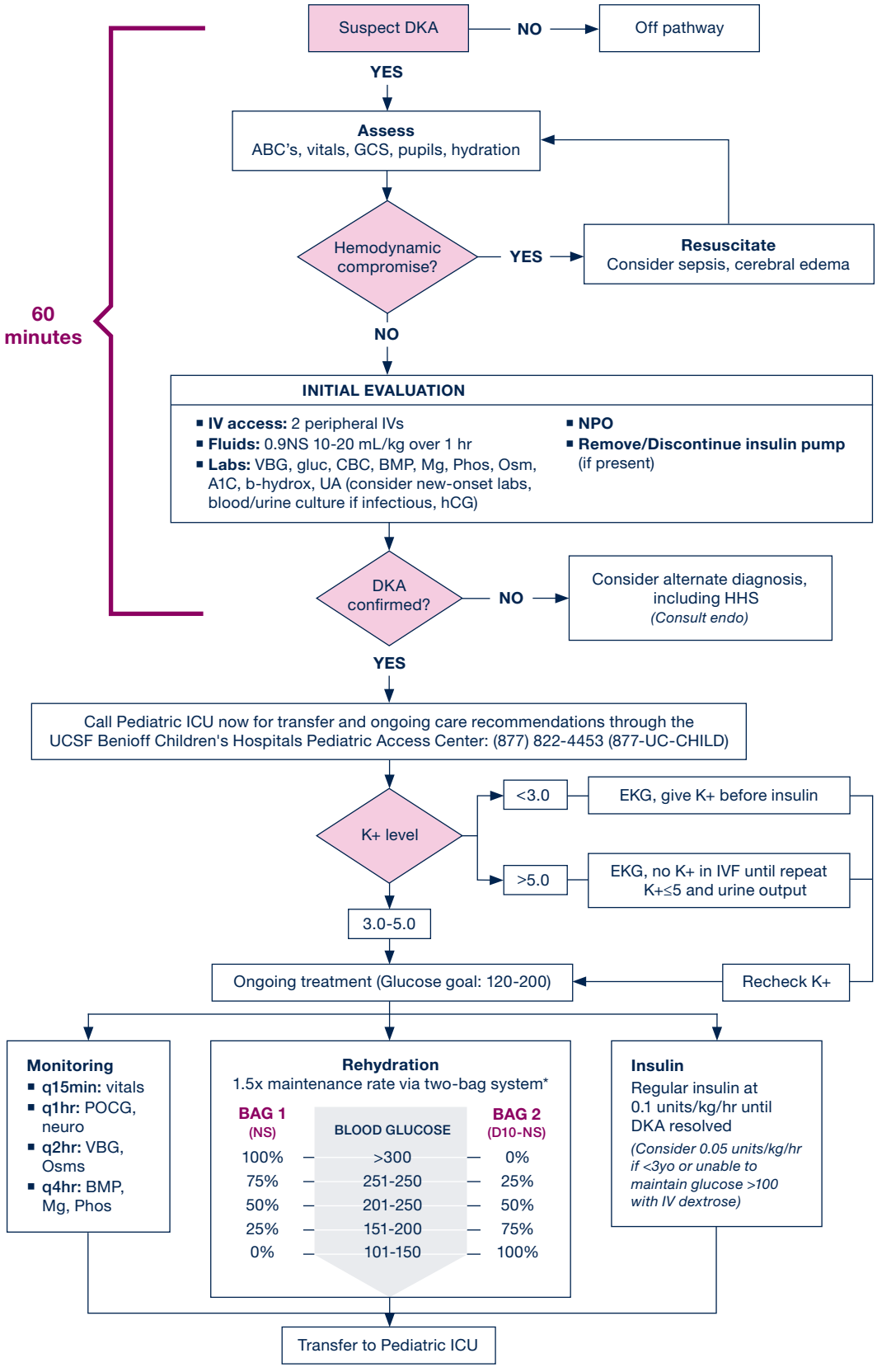
Special considerations:
- Age < 12 months – *consult endocrinology*

Cerebral edema:

Red flags:
- AMS, decreased HR, increased BP, incontinence, vomiting, irregular respirations, anisocoria, headache, lethargy

Treatment:
- Mannitol 0.5-1g/kg IV over 20 minutes, **OR**
- 3% saline 5-10mL/kg over 30 minutes

In DKA:
- Bolus IV insulin **not recommended**
- $NaHCO_3$ for acidosis correction **not recommended**
- IV fluid bolus for tachycardia alone **not recommended**
- **Avoid** corrected Na drop > 0.5–1 mEq/hr



*** DKA TWO-BAG SYSTEM**

Bag 1: Contains 0.9NS +/- electrolytes (typically combination of KCl and KPos)

Bag 2: Contains D10-0.9NS +/- electrolytes (typically combination of KCl and KPhos)

- If K+ <3, do not begin unsulin until K+ supplementation is initiated
- If K+ = 3-5, IVF should contain K+
- If K+ >5, IVF should *not* contain K+
- The combination of the two infusions should always equal 1.5x maintenance fluid rate.
- Begin D10-NS when glucose <300
- Optimal glucose decrease rate = 50-100mg/dL/hr
- If blood glucose falls, the insulin infusion is not typically adjusted. Instead, the balance of D10-NS is adjusted. Can also consider increasing D10-NS to D12.5-NS
- May consider 0.45NS instead of 0.9NS if concerned about or is developing hyperchloremic acidosis.