

Diabetic Ketoacidosis (DKA) vs Hyperglycemic Hyperosmolar Syndrome (HHS)

Associated Power Plans: EDP Diabetes: DKA Pathway;

PICU: PICU DKA;

Inpt: DKA - Diabetic Ketoacidosis Pathway

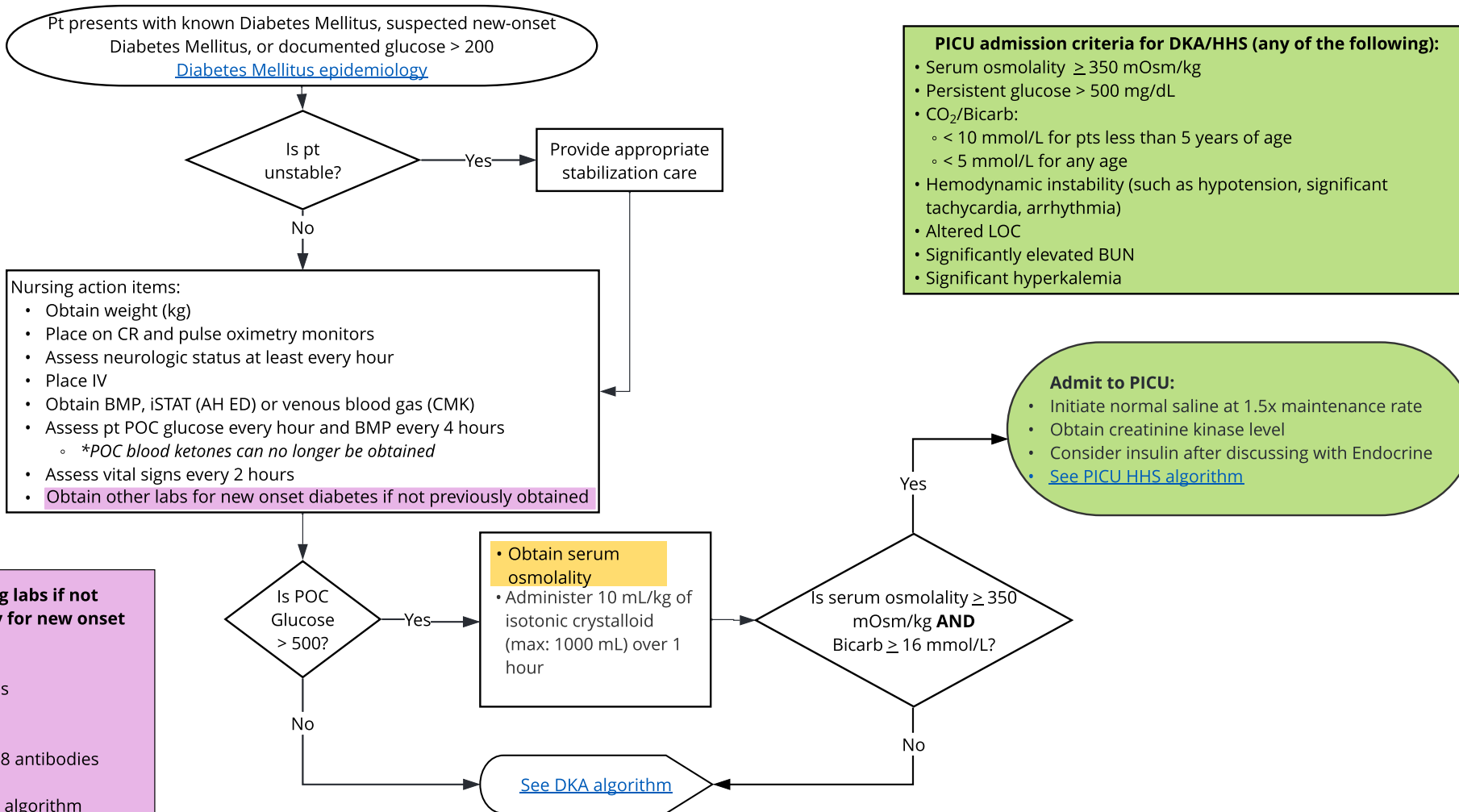


Children's Mercy
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Evidence Based Practice



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Obtain the following labs if not obtained previously for new onset diabetes:

- HgbA1c
- Insulin antibodies
- GAD antibodies
- IA-2 antibodies
- Zinc transporter 8 antibodies
- C-peptide
- Celiac diagnostic algorithm
- TSH diagnostic algorithm

PICU admission criteria for DKA/HHS (any of the following):

- Serum osmolality ≥ 350 mOsm/kg
- Persistent glucose > 500 mg/dL
- CO₂/Bicarb:
 - < 10 mmol/L for pts less than 5 years of age
 - < 5 mmol/L for any age
- Hemodynamic instability (such as hypotension, significant tachycardia, arrhythmia)
- Altered LOC
- Significantly elevated BUN
- Significant hyperkalemia

Admit to PICU:

- Initiate normal saline at 1.5x maintenance rate
- Obtain creatinine kinase level
- Consider insulin after discussing with Endocrine
- [See PICU HHS algorithm](#)

Abbreviations excluding labs and radiology:

DKA = Diabetic ketoacidosis
HHS = Hyperglycemic Hyperosmolar syndrome
ED = Emergency Department
LOC = Level of consciousness
POC = Point of Care N/V = Nausea/Vomiting
CR = Cardiorespiratory PICU = Pediatric Intensive Care Unit
CMK = Children's Mercy Kansas

Contact: EvidenceBasedPractice@cmh.edu

For additional information, [link to DKA synopsis](#); [link to HHS synopsis](#)

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