



# London Health Sciences Centre

Critical Care Trauma Centre

## DIABETIC KETOACIDOSIS (DKA) PREPRINTED ORDER

KEY: R - REQUISITIONED P - PROCESSED (KARDEX)

| NON-MEDICATION ORDERS   | R                     | P     | MEDICATION ORDERS   | P                     |       |
|---|-----------------------|-------|---|-----------------------|-------|
| <p>Reason for Exam / Clinical History and Contact # required for all Radiology / Nuclear Medicine orders.</p> <p><b>LABORATORY WORK / INVESTIGATIONS:</b></p> <p><b>STAT:</b></p> <p><input type="checkbox"/> CBC with differential, INR/PTT, Mg, phosphate, glucose, urea, creatinine, ALT, alkaline phosphatase, bilirubin, HgbA1C (from Lab).</p> <p><input type="checkbox"/> CK, TNT STAT and q 8h X 3.</p> <p><input type="checkbox"/> Electrolytes, arterial and central venous gases, and arterial lactate (POC).</p> <p><input type="checkbox"/> Culture: peripheral blood X 2, sputum and urine.</p> <p><input type="checkbox"/> 12 lead ECG.</p> <p><input type="checkbox"/> Other investigations (determine cause for DKA):</p> <p>_____</p> <p><b>Ongoing:</b></p> <p><input type="checkbox"/> Blood glucose by lab q 1 h until &lt; 20 mmol/L, then by POC</p> <p><b>Until adjusted anion gap is &lt;12:</b></p> <p><input type="checkbox"/> Na, K, Cl, bicarbonate q 2h</p> <p><input type="checkbox"/> Serum Mg and phosphate q 4h</p> <p><input type="checkbox"/> arterial blood gases q 2 h (POC)</p> <p><input type="checkbox"/> <b>Notify MD if:</b></p> <ul style="list-style-type: none"> <li>• Sodium decreases by &gt; 2 mmol/h</li> <li>• Glucose decreases by &gt; 5 mmol/h</li> <li>• Glucose remains unchanged or increases</li> <li>• If sodium does not begin to trend downward after initial 6 hours</li> </ul> <p><b>Adjusted Anion Gap (AG) Calculation:</b><br/> <b>AG = (Na) – (Cl + HCO<sub>3</sub>)</b><br/> <b>Adjusted AG =</b> For every 10 mmol reduction in serum albumin, increase the AG by 2.5. (e.g, if albumin is 20, and calculated gap is 18, the adjusted AG is 23).</p> |                       |       | <p><b>FLUID REPLACEMENT</b></p> <p><input type="checkbox"/> Maintenance I.V. 0.9 % NaCl at 150 mL/h with _____ mmol/L KCl.<br/>(Recommend 20 mmol/L if patient is producing urine and has a serum potassium &lt; 5.5 mmol/L.)</p> <p><input type="checkbox"/> Change maintenance I.V. to 5%D and 0.9% NaCl with _____ mmol KCl when serum glucose is 15 - 16 mmol/L.</p> <p><input type="checkbox"/> Administer 500 mL 0.9% NaCl I.V. bolus q 15 minutes until MAP &gt; 70 mmHg and urine output &gt; 30 mL/h. (Notify physician to reassess patient after EACH bolus.)</p> <p><input type="checkbox"/> Treat potassium, magnesium and phosphate as per Preprinted Electrolyte Protocol.</p> <p><b>BLOOD GLUCOSE GOALS:</b></p> <ul style="list-style-type: none"> <li>• Goal: reduce blood glucose 3 - 5 mmol/L per hour</li> </ul> <p><input type="checkbox"/> Target glucose: _____ mmol/L<br/>(Recommended 10 - 12 mmol/L. Do not reduce blood glucose below this level for 24 hours.)</p> <p><b>INSULIN THERAPY</b></p> <p><input type="checkbox"/> Regular insulin _____ units I.V. STAT (recommend 0.1 units/kg).</p> <p><input type="checkbox"/> Regular insulin 100 units/100 mL of 0.9% NaCl at _____ units per hour I.V. (recommend 0.1 units/kg/h).</p> <p><b>BLOOD GLUCOSE TITRATION:</b></p> <p><input type="checkbox"/> DO NOT stop insulin infusion if hypoglycemia develops*.</p> <p><input type="checkbox"/> When blood glucose is 10 - 12 mmol/L, contact physician to review insulin orders.<br/>(If adjusted anion gap is &lt; 12, consider sliding scale insulin. Do not aim for tight glycemic control until 24 hours post resolution of DKA.)</p> <p><input type="checkbox"/> If blood glucose decreases to 4.0 - 10 mmol/L, give 25 mL 50% dextrose and decrease insulin infusion to 0.5 units per hour and notify physician.</p> <p><input type="checkbox"/> If blood glucose &lt; 4.0 mmol/L, give 50 mL 50% dextrose and decrease insulin infusion to 0.5 units per hour and notify physician.</p> <p><input type="checkbox"/> Continue I.V. insulin for 2 hours after initiation of subcutaneous sliding scale orders.</p> <p>* <b>Note:</b> insulin dependent diabetics are unable to move glucose into the cells without administration of insulin. Administration of dextrose without insulin can induce DKA.</p> |                       |       |
| PRESCRIBER'S<br>PRINTED NAME / SIGNATURE / CONTACT #:   |                       |       | DATE<br>(YYYY/MM/DD):   | TIME:                 |       |
| PROCESSOR<br>INITIALS:  | DATE<br>(YYYY/MM/DD): | TIME: | NURSE<br>INITIALS:  | DATE<br>(YYYY/MM/DD): | TIME: |