

Admit to Dr: _____ Status: Inpatient _____

Allergies: _____

A. **Diet:** NPO except ice chips. When patient able, advance diet as tolerated to _____ calorie ADA diet

B. **Activity:** Bedrest until tolerating diet, then up with assistance. SCD's until ambulatory

C. **Diagnostics:** (if not done already in emergency department):

Check box or fill in to activate:

CBC, RP, Mg, P (phosphate), serum ketones, serum osmolality (may be added to blood in lab if possible, otherwise redraw), ABG, EKG. U/A with urine culture if indicated

LFT ROMI every 6 hours X 3 serum HCG (pregnancy test)

Blood cultures X 2 other cultures or labs: _____

Portable CXR, reason: _____

D. **Laboratory:** Check box or fill in to activate:

Fingerstick blood glucose (BG) every 1 hour (if patient with SBP less than 90 mmHg or in shock, do not use fingerstick, do lab draw)
No lab draw required for fingerstick glucose above 400

Repeat RP and P (phosphate) 2 hours after admit labs, then every 4 hours X 3

venous pH every _____ hours

other follow up labs: _____

E. **IV Fluids:** Check box or fill in to activate:

(General guideline: Assume about 10% dehydration (100 mL/kg). Usually give 1 liter/hour X 4 hours, then 250-500 mL/hour for next 2-4 hours. Correct fluid deficit over 36-48 hours. Give NS initially; give 0.45% NS if corrected Na+ is greater than 150 mEq/dl. Change to D5 0.45% NS when BG below 200 mg/dl.)

0.9% NS at _____ mL/hour X _____ liters with _____ (additive)

Then change fluid to 0.45% NS at _____ mL/hour with _____ (additive)

When blood glucose less than 200, change fluid to D5 0.45% NS with _____ at _____ mL/hour

Other Fluids: _____

F. **Medications:**

Esomeprazole (Nexium) 40mg PO/IV daily (PUD prophylaxis)

Initial Insulin Dose: Initiate insulin only when serum K+ above 3.4. If K+ is below 3.4, potassium replacement must be given prior to starting insulin (a central line is typically required to administer potassium at a rate greater than 10 mEq/hour).

Regular insulin IV bolus: 0.1 units/kg (if not done in ED). Begin insulin infusion at 5 units/hour.

BG greater than or equal to 200 mg/dl:

- If BG has decreased by less than 50 mg/dl in the previous hour, or has increased, increase insulin infusion rate by 50%
- If BG has decreased by 50 - 100 mg/dl in the previous hour, do not change infusion rate
- If BG has decreased by 101 - 200 mg/dl in the previous hour, decrease insulin infusion rate by 25%
- If BG has decreased by more than 200 mg/dl in the previous hour, decrease insulin infusion rate by 50%

BG below 200 mg/dl: (use this scale anytime BG falls below 200 mg/dl)

- Decrease insulin infusion to 3 units/hour. If rate is already less than 3 units/hour, decrease rate by 1 unit/hour
- Continue to adjust insulin infusion rate based on subsequent blood sugar values as follows:

BG below 80 mg/dl	STOP insulin infusion and call physician
BG 81 – 120	decrease rate by 0.5 units/hour
BG 121 – 180	no change in drip rate
BG 181 – 250	increase rate by 0.5 units/hour
BG above 250	bolus 5 units regular insulin and increase drip rate by 0.5 units/hour
BG above 400	call physician

Physician Signature

Date

Time



CRITICAL CARE ADULT DIABETIC KETOACIDOSIS (DKA)
& HYPEROSMOLAR COMA MANAGEMENT ORDERS

P0207A (Rev 1207) White – chart Yellow – pharmacy Pink – nursing

General guidelines in treatment of Diabetic Ketoacidosis (DKA) or Hyperosmolar Coma

	DKA			Hyperosmolar Coma
	Mild	Moderate	Severe	
Plasma glucose (mg/dl)	>250	>250	>250	>600
Arterial pH	7.25-7.30	7.00-7.24	<7.0	>7.3
Serum bicarbonate (mEq/L)	15-18	10 to < 15	<10	>15
Urine ketones	positive	positive	positive	Small
Serum ketones	positive	positive	positive	Small
Effective serum osmolality(mOsm/kg)	Variable	Variable	Variable	>320
Anion gap	>10	>12	>12	<12
sensorium	Alert	Alert/drowsy	Stupor/coma	Stupor/coma

Management of IV fluid:

Choice of fluid depends on corrected Na = measured Na + [2.4 X (plasma glucose – 100)/100].

- 0.9% NS recommended if corrected Na less than or equal to 135
- 0.45% NS recommended if corrected Na greater than 135

D5 should be added to IVF when blood glucose is below 200-250.

Electrolyte management:

1. **Potassium:** do not start supplementation until urine output established. Usually add 20 – 40 mEq of KCl to each liter of IV fluid.
2. **Bicarbonate:** generally replacement not recommended. May administer only if pH below 7.0; give 50 meq Na bicarbonate in 0.45% NS with KCl 20 meq/liter over 1 hr. NEVER give bicarbonate therapy as a bolus when treating DKA. The non-gap acidosis that occurs in the recovery phase generally does not require management.
3. **Phosphate:** generally replacement not indicated despite anticipated fall during days 1 and 2. May administer only if serum Phosphate below 1 mg/dl. Use Na phosphate (3 mMol PO₄/mL; 4 meq Na/mL). Give phosphate ordered in millimoles over 6 hours, and monitor Ca, PO₄, and Na. Do not use if patient has hypercalcemia or renal failure. Risk of hypocalcemia is increased with phosphate therapy.
4. **Magnesium:** administer only if serum magnesium below 1.8 mg/dl or if patient has tetany; give 5 gms Magnesium sulfate in 500 mL 0.45% NS over 5 hours (100 mL/hour).