

## DIABETES KETOACIDOSIS (DKA) SS

### NURSING

Notify Physician If:

- Bicarbonate level < 7
- Bicarbonate (CO<sub>2</sub>) on BMP is ≥ 19 MmoL/L x 2, at least 4 Hrs apart, to obtain orders to transition from IV insulin to SubQ insulin regimen.
- Any STAT lab or radiology results

Blood glucose monitoring (BGM) - Q 1 Hr for Critical Care patients

Blood glucose monitoring (BGM) - Q 2 Hrs for patients not in Critical Care

Indwelling urinary catheter to gravity drainage; Reason: \_\_\_\_\_

### RESPIRATORY

Apply Oxygen (O<sub>2</sub>) with defined parameters to maintain oxygen SAT ≥ 90%

### NUTRITION

NPO except Ice Chips

NPO

Diabetic 1800 Calorie Diet

Diabetic STANDARD 2000 Calorie Diet

### IV FLUIDS

Sodium Chloride 0.9% IV to run at 100 mL/Hr, switch to D5/0.45% NS (if ordered) Prn BG ≤ 250.

RN to contact pharmacy to make NS order Prn BG > 250 and make D5/0.45% NS scheduled.

Dextrose 5%/0.45% Sodium Chloride IV to run at 100 mL/Hr Prn when BG ≤ 250, switch to NS (if ordered) Prn BG > 250 mg/dL. RN to contact pharmacy to make D5/0.45% NS order Prn BG > 250 and make NS scheduled.

### MEDICATIONS

#### PO POTASSIUM ORDERS

Potassium Chloride (KDur) 60 mEq Po Prn potassium 2.5 – 3.4 mEq/L. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

Potassium Chloride (KDur) 40 mEq Po Prn potassium 3.5 – 3.8 mEq/L. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

#### NG POTASSIUM ORDERS

Potassium Chloride liquid (20 mEq/15 mL) 60 mEq NG Prn potassium 2.5 – 3.4 mEq/L. If patient is unable to take Po Potassium Chloride (if ordered) and has an NG tube. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

Potassium Chloride liquid (20mEq/15mL) 40 mEq NG Prn potassium 3.5 – 3.8 mEq/L. If patient is unable to take Po Potassium Chloride (if ordered) and has an NG tube. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

#### IV POTASSIUM ORDERS

Potassium Chloride 40 mEq/250 mL NS IVPB Prn potassium 2.5 – 3.4 mEq/L. If pt unable to take Po or NG Potassium Chloride (if ordered). See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

Potassium Chloride 20 mEq/100 mL premixed IVPB Prn potassium 3.5 – 3.8 mEq/L. If pt unable to take Po or NG Potassium Chloride (if ordered). See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if

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MEDITECH NAME: DIABETES KETOACIDOSIS-SS

MEDITECH MNEMONIC: EN.DKA

ZYNX-DKA HHS SS

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patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

**IV POTASSIUM WITH LIDOCAINE ORDERS**

- Potassium Chloride 40 mEq + Lidocaine 40 mg/250 mL NS IVPB Prn potassium 2.5 – 3.4 mEq/L. If pt unable to take Po or NG Potassium Chloride (if ordered). See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.
- Potassium Chloride 20 mEq + Lidocaine 20 mg/100 mL NS IVPB Prn potassium 3.5 – 3.8 mEq/L. If pt unable to take Po or NG Potassium Chloride (if ordered). See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.


**IV MAGNESIUM REPLACEMENT ORDERS**


- Magnesium sulfate 4 Gm/100 mL premixed IVPB Prn magnesium 0.8 – 1.3 mg/dL. See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.
- Magnesium sulfate 2 Gm/50 mL premixed IVPB Prn magnesium 1.4 – 1.7 mg/dL. See Lexi Comp for unit specific rate of administration. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

**IV PHOSPHORUS REPLACEMENT ORDERS**

- Sodium phosphate 18 mmol IVPB in 150 mL D5W over 4 Hrs Prn phosphorus 1.1 – 1.6 mg/dL. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.
- Sodium phosphate 9 mmol IVPB in 100 mL D5W over 2 Hrs Prn phosphorus 1.7 – 2.3 mg/dL. Hold if creatinine is > 1.8 mg/dL or if patient is receiving any form of dialysis or if patient has urine output < 360 mL/shift (for ICU pts. hold if average urine output < 30 mL/Hr.) Notify MD if held.

**ENDOCRINE MEDICATIONS: Insulin  Evidence**

REMINDER: For patients with uncomplicated DKA, regular insulin should be given as an initial dose of 0.4 to 0.6 units/kilogram (half as IV bolus and half given intramuscularly or subcutaneously), followed by 0.1 units/kilogram every hour given intramuscularly or subcutaneously  Evidence

REMINDER: IV regular insulin is the treatment of choice, except for patients with uncomplicated DKA  Evidence

- Regular insulin 100 units/ 100 mL NS (Concentration: 1 unit/mL). Loading dose (0.15 units/Kg, Max = 10 units) = \_\_\_\_units IV x 1 dose (from Insulin bag) then start at algorithm 1. Move to algorithm 2 if BG outside goal range (150 – 200 mg/dL) and BG has not changed by at least 60 mg/dL within 1 glucose check. If BG is < 70 mg/dL x 1 move back to algorithm 1, turn off drip, recheck BG in 15 mins and notify MD. Desired rate of BG fall: 50 – 70 mg/dL/Hr

Algorithm 1		Algorithm 2	
< 69 mg/dL follow hypoglycemia orders			
BG mg/dL	Units/Hr	BG mg/dL	Units/Hr
< 70	Off	<70	Off
71-109	0.5	71-109	1
110-119	1	110-119	2
120-149	1.5	120-149	3
150-179	2	150-179	4

180-209	3	180-209	5
210-239	4	210-239	6
240-269	5	240-269	8
270-299	6	270-299	10
300-339	7	300-339	12
340-359	8	340-359	14
> 360	12	> 360	16

Hypoglycemia orders

For BG < 50 mg/dL turn off drip. Give D50% 50 mL IV Push. Recheck BG in 15 mins. Notify MD.

Other medications: \_\_\_\_\_

**\*All labs/diagnostics will be drawn/done routine now unless otherwise specified**

**LABORATORY – Cardiac Markers**

Troponin I Quantitative- STAT

**LABORATORY – Hematology**

REMINDER: Order Hemoglobin A1c if none available within past 3 months

Hemogram (HMG) - STAT

Hemoglobin A1c - STAT

**LABORATORY – Chemistry (STAT)**

Chemistry Panel Comprehensive (CMP) - STAT

Magnesium - STAT

Amylase - STAT

Lactic acid - STAT

Ionized Calcium (ICA) - STAT

Serum Osmolarity - STAT [Evidence](#)

**LABORATORY - Chemistry**

Basic Metabolic Panel (BMP) - Q 6 Hrs X 24 Hrs

Ionized Calcium (ICA) - Q 6 Hrs X 24 Hrs

Ionized Calcium (ICA) - In AM

Phosphorus - Q 6 Hrs X 24 Hrs

Phosphorus - In AM

Magnesium - Q 6 Hrs X 24 Hrs

Magnesium - In AM

Ketone (Beta-Hydroxybutyrate) - URGENT Q 6 Hrs X 24 Hrs [Evidence](#)

Ketone (Beta-Hydroxybutyrate) - In AM [Evidence](#)

pH Venous Blood Q 6 Hrs X 24 Hrs

Chem Panel Hepatic Function (LFT) - In AM

Lipase - In AM

**LABORATORY – Blood Gas**

Arterial Blood Gas (ABG) - STAT

Arterial Blood Gas (ABG) - In AM

**LABORATORY - Urine**

Urinalysis Reflex Culture (UATC) - STAT

Urinalysis Reflex Culture (UATC)

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**MICROBIOLOGY**

- Blood culture X 2 from different sites - STAT

**DIAGNOSTICS - Cardiology**

- Electrocardiogram (EKG) - STAT; Reason for exam: Arrhythmia  
 Electrocardiogram (EKG) - In AM; Reason for exam: Arrhythmia

**DIAGNOSTIC – Radiology**

- Chest 1 View X-ray (CXR) Portable - STAT; Reason for exam: \_\_\_\_\_  
 Chest 2 View X-ray (CXR) Portable - STAT; Reason for exam: \_\_\_\_\_

**REQUEST FOR SERVICE**

- Consult for Nutrition Instruction  
 Consult for Case Management  
 Consult for Social Services  
 Consult for Diabetes Education on self-monitoring blood glucose, hypo/hyperglycemia and medications.  
 Outpatient Diabetes Education. Refer patient to Outpatient Center for Health Promotion. FAX facesheet to # (714) 628-3242.