



**PHYSICIAN ORDERS
FOR
Initial Management of Suspected
DIABETIC KETOACIDOSIS in the
EMERGENCY DEPARTMENT**

Page 1 of 2

Patient Identification

Weight: _____ kg Height: _____ cm Allergies: _____

REFER to PEDSPAC DKA ALGORITHM

Initial on all lines applicable

DIET:

_____ NPO _____ Ice chips

VITAL SIGNS/MONITORING:

- Cardiorespiratory monitor, RR, HR, BP, Neuro VS including headache assessment q1h
- Administer oxygen 10-15 L/min by non-rebreather mask (if signs of shock)
- Strict Ins & Outs

_____ Other: _____

INITIAL INVESTIGATIONS:

- Na, K, Cl, glucose, creatinine, urea, venous blood gas, serum osmolality
- POCT urinalysis
- If new onset diabetes: TSH, thyroid antibodies, HbA1c (*If available*)

_____ Other: _____

ON-GOING INVESTIGATIONS:

- Bedside glucose q1h until dextrose added to IV then q2h (also at initiation of insulin and 1 hour after any change in insulin dose)
- Na, Cl, K, glucose, venous blood gas, serum osmolality q2-4h
- POCT urinalysis q4h

INITIAL FLUID RATES (HOURS 0 – 12):

Initial Fluids (for patients with signs of cerebral edema, see Page 2)

- NS bolus of _____ mL (10 mL/kg) IV over 30 minutes, THEN

_____ Repeat NS bolus of _____ mL (10 mL/kg) IV over 30 minutes if signs of hypoperfusion (tachycardia, cap refill >2 sec, cool extremities), THEN

_____ NS at _____ mL/hr IV (SEE FLUID RATE TABLE BELOW)

Weight:	5 – <10 kg	10 – <20 kg	20 – <40 kg	≥40 kg
mL/kg/hr:	6.5	6	5	4 (MAX 250 mL/hr)

On-going Fluids

_____ Add 40 mmol/L **KCl** to initial fluids once serum K+ is less than 5 mmol/L AND patient has voided

- If blood glucose is less than 15 mmol/L OR decreases by more than 5 mmol/L per hour once the glucose is less than 25 mmol/L, change fluids to:
D10NS with _____ mmol/L KCl at _____ mL/hr IV (SEE FLUID RATE TABLE ABOVE)

Insulin

- Do not start insulin until 1 hour after IV fluids have been started (not longer than 2 hours)

_____ **Insulin** regular 1 unit/mL at 0.1 units/kg/hr IV

***** Ensure nurse is aware of page 2 at the time of completion *** Continued on Page 2 ...**

PHYSICIAN SIGNATURE

PRINT NAME OF PHYSICIAN

DATE & TIME

NURSE SIGNATURE

PRINT NAME OF NURSE

DATE & TIME

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Page 2 of 2

Patient Identification

Weight: _____ kg Height: _____ cm Allergies: _____

... Continued from Page 1

Initial on all lines applicable

CONSULT:

- Pediatric Diabetes/Endocrinology or Pediatric Specialist
____ PICU – Pediatric Referral Centre (if pH less than 7.1, age less than 5 years, hypotension, or suspected cerebral edema)

FOR SUSPECTED CEREBRAL EDEMA

Glasgow Coma Scale less than 14, and/or irritability in younger children, and/or Cushing's triad: ↑BP, ↓HR, ↓RR

- Move to Resuscitation area
- Nurse in continuous attendance of patient
- Raise head of the bed to 30°

IV FLUIDS

- Decrease IV fluids to 60% of initial IV Fluid Rehydration Rates (SEE FLUID RATE TABLE BELOW):

If hypoperfused (tachycardia, cap refill >2 sec, cool extremities)

____ NS bolus of _____ mL (10 mL/kg) IV over 30 minutes

60% of Initial IV Fluid Rehydration Rates				
Weight:	5 – <10 kg	10 – <20 kg	20 – <40 kg	≥40 kg
mL/kg/hr:	3.9	3.6	3	2.4 (MAX 150 mL/hr)

Weight:	5 – <10 kg	10 – <20 kg	20 – <40 kg	≥40 kg
mL/kg/hr:	3.9	3.6	3	2.4 (MAX 150 mL/hr)

____ 3% NaCl _____ mL (5 mL/kg/dose, MAX 250 mL) IV over 10 minutes **OR**

____ Mannitol _____ g (0.5-1 g/kg/dose, MAX 100 g) IV over 15 minutes

____ STAT CT head scan (*Should be done at the Pediatric Referral Centre*)

PHYSICIAN SIGNATURE

PRINT NAME OF PHYSICIAN

DATE & TIME

NURSE SIGNATURE

PRINT NAME OF NURSE

DATE & TIME