

Diabetic Ketoacidosis (DKA) Care Pathway Adults ≥ 18 Years 0 – 4 Hours

DKA = Ketonaemia ≥ 3.0mmol/L + Blood glucose ≥ 11mmol/L + Venous pH < 7.3 or Bicarbonate < 15mmol/L

Triage Time/ Zero Hours	Complete	Blood results	0 Hours	Hour 1	Hour 2	Hour 4
Bedside blood glucose	☐	Bedside glucose				
Bedside blood ketones	☐	Bedside ketone				
Start fluids within 30 minutes of triage time (see below)	☐	pH	X			
Start IV insulin within 30 minutes of triage time (see below)	☐	H ⁺	X			
Sample U+Es and check venous blood gas	☐	Sodium 135-147 mmol/L	X			
Review and replace potassium as per guideline below	☐	Potassium 3.5-5.0 mmol/L				
Screen for signs of cerebral oedema e.g. headache, ↓GCS	☐	Urea 3.3-6.6 mmol/L	X			
Senior review	__:_hrs	Creatinine 44-80 umol/L	X			
Discuss with MHDU	__:_hrs	Bicarbonate 24-30 mmol/L	X			
Replace potassium when first result/recent result available. Prescribe Potassium Chloride in IV Sodium Chloride 0.9% 500ml. Potassium dose: None if anuric or K ⁺ > 5mmol/L 10mmol if K ⁺ 3.5-5.0 mmol/L 20mmol if K ⁺ <3.5mmol/L* *KCL should not normally be administered at a rate > 20mmol/hour.		eGFR	X			
		Lactate 0.7-1.8 mmol/L	X			
		Amylase 0-100 U/L	X	X	X	
		Lab glucose 3.3-5.8 mmol/L	X			

LINE 1 Fluid (potassium) prescription

Date	Fluid type	Volume (ml)	Rate (ml/hr)	Prescribed by	Batch no.	Start time	Finish time	Admin. by	Via pump if small calibre cannula
	Additive	Dose			Batch no.			Checked by	
	Sodium chloride 0.9%	1000	1000						Must be via infusion pump
	Sodium chloride 0.9%	500	1000						
	Sodium chloride 0.9%	500	1000						
									Must be via infusion pump
	Sodium chloride 0.9%	500	500						
	Sodium chloride 0.9%	500	500						Must be via infusion pump

LINE 2 Glucose (potassium) prescription

Infuse glucose concurrently with saline when blood glucose ≤14mmol.
 Reduce sodium chloride rate to 400ml/hr when glucose commences.
 DO NOT STOP GLUCOSE ONCE STARTED

	Glucose 10%	500	100						Via pump
	Potassium chloride	20 mmol							
	Glucose 10%	500							
	Potassium chloride	20 mmol							

Intravenous Insulin prescription

- Start the insulin rate at 6 units/hour in the first 60 minutes
- Infuse using a syringe driver
- Adjust the insulin rate to maintain blood glucose level 9-14mmol/L
- Do not reduce insulin rate below 2 units/hour as insulin is required to correct ketosis
- Prescribe long-acting insulin as per patient's usual regimen

If blood glucose continues to fall, consider increasing glucose infusion rate – confirm with senior medical staff

Fluid type	Volume	Rate (units/hr)	Prescribed by	Batch no.	Admin. by	IV Insulin Scale for DKA:		Prescriber
Insulin type	Dose		Date	Batch no.	Check by	Blood glucose	Insulin rate	Date
Sodium chloride 0.9%	49.5 ml	See Scale				>14 mmol/L	6 units/hour	
Actrapid Insulin	50 units					≤14 mmol/L	3 units/hour	
Sodium chloride 0.9%	49.5 ml	See Scale						
Time	Blood glucose	Insulin rate (units/hour)	Total insulin infused (ml)	Volume remaining in syringe (ml)		IV glucose rate (ml/hr)	Cannula check	Initials
		6					☐	
							☐	
							☐	