**IMMEDIATE MANAGEMENT 0-60 MINUTES**

**ACTION 1**

**ALL 3 OF THE FOLLOWING MUST BE PRESENT TO CONFIRM DKA**

1. Capillary blood glucose (CBG) 11.0mmol/L or known diabetes
2. Capillary blood ketones >3.0mmol/L or 2+ ketonuria
3. Venous pH <7.3 and/or venous bicarbonate <15mmol/L

**CONFIRM**

**ACTION 2**

- Na⁺
- K⁺
- Urea
- Creatinine
- Chloride
- eGFR
- Lactate
- Lab glucose
- GCS
- EWS

**BASELINE ASSESSMENT**

**ACTION 3**

- ECG
- CXR
- MSU
- β-HCG
- STOOL MC&S
- BLOOD CULTURES
- CT HEAD
- VTE PROPHYLAXIS GIVEN?

**INVESTIGATIONS**

**ACTION 4**

**INFECTION/SEPSIS**

**STRESS**

**NON-COMPLIANCE**

**IDIOPATHIC**

**OTHERS** (STEROIDS, ALCOHOL, PREGNANCY, PUMP FAILURE)

**PRECEPTRATING FACTORS**

**ACTION 5**

**Patient shocked (SBP<90 mmHg) or severe DKA***

- SpR/Consultant informed?

**Time:**

**IS THE PATIENT SHOCKED?**

- YES
  - Give 500ml 0.9% Sodium Chloride (NaCl) over 15 mins and give another 500ml bolus over 15 mins if SBP still <100mmHg (Hypotension is likely to be due to low circulating volume but consider other causes such as sepsis/heart failure etc.)
- NO
  - Give 1L 0.9% Sodium Chloride over an hour

**ACTION 6**

**Prescribe 50 units of Actrapid in 49.5ml 0.9%NaCl (1unit/ml)**

**Done?**

**Initial Insulin rate:**

**Time:**

**Weight:**

**kg**

**Initial Insulin rate:**

**ml(units)/hour**

**If patient takes long acting insulin e.g. Insuman Basal or Humulin I or Glargine or Levemir or Degludec or Toujeo continue as normal (circle which applies)**

**Dose:**

**Units**

**ACTION 7**

**Venous potassium level**

- Potassium Chloride (KCI) replacement
  - NONE
  - 40mmol/L
  - SENIOR ADVICE, additional K⁺ required

**Life threatening hypokalaemia can occur with insulin infusion.**

- If K⁺ infusion is greater than 20mmol/hour cardiac monitoring is needed

**DO NOT GIVE KCI IF ANURIC**

**ACTION 8**

**Poor urine output (<<0.5ml/kg/hour)**

**Consider NGT**

**Persistant vomiting or reduced GCS**

**SpO₂<94% On Air**

**Consider other causes**

**Consider CT head**

**Name**

**Time**

**RESSESS PATIENT**

**Catheterise**

**ABG/CXR**

**Consider other causes**

**Consider CT head**
### TREATMENT AIMS:
1. Blood ketones to fall by at least 0.5mmol/L/hour
2. Venous bicarbonate to rise by at least 3mmol/L/hour
3. Blood glucose to fall by at least 3mmol/L/hour

If this is not being achieved, check the patency of the lines, check infusion pumps BEFORE increasing insulin by 1-2unit/ml/hour

### RESOLUTION OF DKA
- Resolution of DKA is defined as pH>7.3 and blood ketones<0.3 mmoll/L
  1. If DKA has resolved and the patient is eating and drinking – switch to SC insulin (refer to TG team or DKA guideline on intranet)
  2. If DKA has resolved but the patient cannot eat OR has another indication for IV insulin (severe sepsis/MI)- use a VRI infusion (see Medical guidelines)
  3. Inform DSN/ThinkGlucose Team

By 24 hours ketonaemia and acidosis should have been resolved. Seek senior review or Diabetes Team support if not improving