High Blood Glucose Levels and Illness Management for Type 1 Diabetes

Blood Glucose ≥14mmol/L or Blood Glucose 10-14mmol/L with associated dehydration or symptoms of illness

Test Blood Ketones

Ketones below 0.6mmol/L

Ketones 0.6-1.5mmol/L

Ketones over 1.5mmol/L

Ketone Level Acceptable

Treat high blood glucose with usual correction dose
Continue monitoring blood glucose and ketones every 1-2 hours.
If not eating, replace food with small amounts of sugary fluids.
If eating, have insulin with food as usual and encourage frequent sips of sugar-free fluids.
Treat illness as usual, e.g., Paracetamol, contact GP
Phone Diabetes team back if no improvement

INSULIN PUMP USER

1. Advise immediate administration of rapid acting insulin by S/C pen injection

   Blood Glucose >14mmol/L: - Dose calculation –
   Either: a. 10% of Total Daily Dose or
   20% of Total Dose if ketones >1.5mmol/L
   Or b. 0.1 units of insulin/kg of body weight

   Blood Glucose 10-14mmol/L: - Dose calculation –
   Either: a. 5% of Total Daily Dose or
   10% of Total Dose if ketones >1.5mmol/L
   Or b. 0.05-0.1 units of insulin/kg of body weight

2. Ask carer to disconnect pump from child and do a pump self-check and re-prime infusion set to check pump is working
3. If the pump is working the cannula needs replacing
4. Change the reservoir as well if there are any uncertainties
5. Reconnect pump
6. Consider increasing temporary basal rate by 10-20% every 2 hrs

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   Never stop taking insulin
   Encourage frequent sips of sugar-free fluid and replace food with small amounts of sugary fluid if not eating

Re-test Blood Glucose and Ketones in 1-2 hours.
Are there signs/symptoms of DKA? (see chart below)

After 2hrs: Blood glucose >10mmol/L
(If blood glucose ≤10mmol/L follow flow chart for Normal & low blood glucose with illness)

Ketones below 0.6mmol/L

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NEEDS HOSPITAL ASSESSMENT

Please call Emergency advice Line or ward

Clinical Features of DKA

Polyuria, Polydipsia and Weight loss
Nausea and Vomiting (Admit if vomited more than 2 times)
Abdominal pain
Shortness of breath/Rapid breathing
Altered conscious level
Dehydration
(See DKA Protocol on intranet)

Created by Leeds Paediatric Diabetes Team April 2016.