


ThinkAskLearn
Health Professional Education

Diabetic Emergencies

The Case of the Dodgy Chicken

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The Dodgy Chicken


- Sunday morning at triage
- 6 yr old boy presents with Mum
- Up all night vomiting
- Dad also unwell this morning with vomiting
- Both Dad and Son had 'dodgy takeaway chicken' yesterday for lunch
- Mum did not eat the chicken



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The Dodgy Chicken

- Good story, doesn't look too unwell
- Mild dehydration
- Rehydrate with oral fluids
- Sit in WR until review
- Finally gets picked up
- Someone does a BSL
- It reads HI HI HI



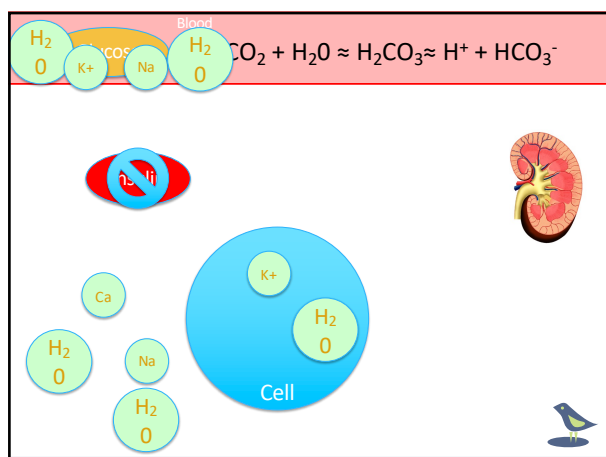
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Diabetic KetoAcidosis DKA

- Insulin deficiency
- Glucose rises
- Renal System attempts to compensate
- Fails
- Acidosis ensues
 - Oxygen transport and capacity – Hypoxia



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Signs and Symptoms

- Patient is unwell
- BSL >15mmol, often 20+mmol or HiHiHi
- Polyuria
 - Large amount of urine production
- Polydipsia
 - Increased Thirst
- Kussmaul Breathing
 - Deep laboured breathing – Blowing off CO₂



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Diagnosis

- No definitive criteria for the diagnosis of DKA
- DKA is defined by the triad of:
- Hyperglycaemia (glucose > 14 mmol/L)
- Ketosis (usually determined on urinalysis)
- Acidosis (pH < 7.35; low HCO₃: high anion gap)
- (Hence the name, diabetic-keto-acidosis!)



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At Risk

- Precipitants of DKA are:
 - Infection (35%)
 - New onset DM (25%)
 - Non-compliance with therapy (20%)
 - AMI
 - CVA
 - Pregnancy
 - GI Bleed
 - Pancreatitis
 - Unknown (10%)



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Immediate Management

- Call for help – ambulance
- ABCD approach
- Undertake BSL
- Collect vital signs
- In-Hospital – Likely ICU admission



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In Hospital Treatment

- Undertake Blood Gas!
- Find source
 - Infection, Non compliance, other
- Fluid replacement - 2-3 litres in first hour
- Give insulin
- Replace electrolytes
- Admit to hospital - usual ICU



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Caring for the unwell student

- When unwell (flu, common cold etc) blood glucose can rise
 - Requires more monitoring, insulin,
- Nausea/vomiting a concern
 - Lack of food absorption,
- In sick bay – should be in line of sight
- 'When a student with type 1 diabetes is unwell at school it is expected that their parents have been contacted to collect them and they will be cared for at home.'



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The Opposite Way

- Hypoglycaemia
- Usually too much insulin or lack of food or misadventure with insulin!!
- Hard to die from Hypoglycaemia – Sort of...
- Common yearly in diabetics (27%)
- Defined as BSL <4mmol/l but S+S common under 2.6mmol/l



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Insulin Pumps and more...

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Signs and Symptoms

- Maybe minimal to extreme
- Paleness
- Shakiness
- Headache
- Sweating
- Feeling hungry
- Dizziness
- heart pounding
- Irritability, change in mood
- Lack of concentration
- Confusion
- Vagueness
- Crying
- Weakness



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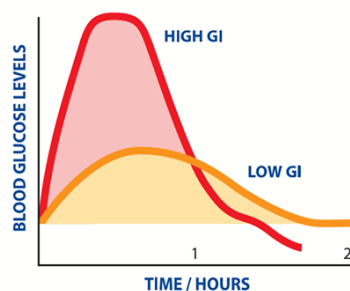
Treatment options

- ABCD approach
- Treat if BSL is less than 4mmol/l
- Give some high GI carbohydrate (sugar) to raise the blood glucose quickly
 - Jelly babies
 - Simple sugars
 - Lemonade
- Overtreatment is a problem



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What sugar to give



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Treatment options

- After allowing for sugars to be absorbed, provide further glucose
 - Banana/Apple
 - Sandwich
 - Biscuits/Crackers
 - Milk



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Unconscious Hypoglycaemia

- ABCD approach
- Call for help – trip to ED
- Airway supportive maneouvers
- Oxygen
- Check BSL (look for other causes)
- Provide IV glucose or IM glucagon



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Caution with Discharge

- Observe for 2-4 hours
- Find the cause
- Admit to hospital all unknown causes of hypoglycaemia



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Register for Training

Welcome to Diabetes in Schools

The **Diabetes in Schools** program provides free, online training for teachers and school staff to better understand how they can support students with type 1 diabetes while at school.

Principals, teachers and school staff can access information and support through online video-based modules and hands-on training to help students with type 1 diabetes thrive at school.



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