Hypoglycaemia
Paramedic case studies #7

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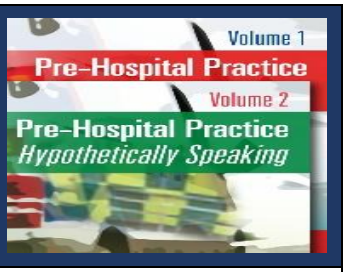

Past history

You are attending a 24 year old man who has a past history of insulin dependent diabetes (type1). He has had numerous past hypoglycaemic episodes that are normally addressed by quickly eating some form of glucose containing product. He does not usually attend hospital afterward.

Today

For the last 24 hours he has had signs and symptoms of a flu like malaise and spent much of the time lying in bed. This morning he administered his insulin as usual and ate a smaller than usual breakfast. He vomited soon after before collapsing onto the bathroom floor. He was not found until his partner returned home an hour later after shopping. He was still lying on the floor wearing only short pants and t-shirt that he sleeps in.

On examination

CNS GCS=14 eyes open to pain (2) incomprehensible verbal (2) and withdrawal to pain L=R (4)
CVS pale cool clammy P=90 BP=110/70
Resp 12min no dyspnoea evident with shallow effort, on ausc chest clear L=R.
ECG sinus rhythm
Pulse oximetry unable to get a reliable reading
BSL 1.0mmol/L
Body temperature 32°C (don't reveal this unless the student asks for reading)

Working assessment

Hypoglycaemia, altered conscious

Management

Discuss criteria for how to become hypoglycaemic – insulin, exercise and food mismatched.
Which is the problem in history? Include increased metabolism and decreased eating in illness.
What position to place patient? – depends on conscious state, likely lateral
Airway – what options if needed. Discuss lateral position, OPA difficulties and NPA benefits if needed
Oxygen – is it needed?
Body temperature – discuss sweating and immobility caused by hypoglycaemia and frequent associated hypothermia. This will slow recovery. Must recognise and manage early and concurrently by protecting from further heat loss and appropriate rewarming strategy
Hypoglycaemia management – discuss options based on conscious state. Oral if cooperative and BSL not too low. If not, discuss pros and cons of IV dextrose versus glucagon including difficulty gaining IV access and risks of incorrectly placed IV versus slower time to effect for glucagon
Scene time – is it necessary to transport this patient? Maybe yes if the underlying problem requires management to avoid a repeat