

Lightning Learning: Hypoglycaemia (Adults)



em3.org.uk









F @ @EM3FOAMed



STOP!

In diabetics, hypoglycaemia is defined as a CBG <4.00 mmol/L ('four is the floor').

In non-diabetics, hypoglycaemia is often defined as a CBG <3.3 mmol/L.

RISK FACTORS IN DIABETES:(1)

Recent change in medication regime; fasting (e.g. during Ramadan); iatrogenic (e.g. prescribing VRIII without glucose); renal impairment; alcohol consumption; advanced age; intercurrent illness; exercise and heat.

Important causes in non-diabetics:

Alcoholic chronic liver disease and (rarely) insulinoma.

Hypoglycaemia should be excluded in anyone presenting with potentially neuroglycopenic symptoms: (2)

- Reduced level of consciousness
- Unusual behavior/confusion
- Seizures
- Features of stroke

LOOK

True hypoglycaemia is diagnosed using Whipple's Triad:

- 1. Hypoglycemia symptoms
- 2. Accompanying low CBG
- 3. Resolution of symptoms after raising blood glucose to normal

CLINICAL FEATURES

- Autonomic symptoms, e.g. pallor, sweating, tachycardia, hunger
- Neuroglycopenic symptoms
- Nonspecific symptoms, e.g. general malaise, headaches, nausea

DON'T FORGET!

Loss of hypoglycaemia awareness and warning symptoms are common in patients with long-standing diabetes. Severe prolonged hypoglycaemia can cause

HYPOGLYCAEMIA CAN BE FATAL

cerebral oedema and brain damage.

LEARN

Beware of iatrogenic hypoglycaemia when managing patient with hyperkalaemia or DKA.

HYPERKALAEMIA

→ Monitor CBG at 0, 15, 30, 60 & 90 mins, and at 2, 3, 4 and 6 hrs

DIABETIC KETOACIDOSIS

- → Prescribe 10% glucose 500 ml (with 20 mmol KCl if serum K is 3.5-5.5mmol/L) at 125ml/hr to run alongside 0.9% NaCl as soon as blood glucose is <14 mmol/L
- → Switch patients from fixed rate IV insulin infusion to variable rate or s/c insulin once blood ketones are < 0.6 mmol/L

For the management of hypoglycaemia in diabetics see our local guidance. (3)

REFERENCES

(1) http://bit.ly/39rHRTX

(2) http://bit.ly/38tTgmh

(3) http://bit.ly/37C5sQi