Diabetic Emergencies and Advices

Hypoglycemia

- It can occur in those treated with insulin and occasionally with a sulfonylurea drug. Rarely with metformin-treated patients
- Blood glucose: (<3.5 mmol/l or 63 mg/dl)
- Sx:

Autonomic	Neuroglycopenic	Others
Sweating Trembling 发抖 Tachycardia Palpitations Pallor 苍白	Faintness, Loss of concentration, Drowsiness, Visual disturbances, Abnormal behavior (agitation, aggressiveness), Confusion, Coma	Hunger Headache Tiredness

- Increase alcohol consumption can lead to this due to impaired gluconeogenesis
- Tx:
  - ➢ Early Tx: carbohydrate meal (10-20g of rapidly absorbing carbohydrate. Process is repeated every 15-20 mins if glucose conc remains <60 mg/dl or if patient is symptomatic)
  - ➢ If unable to swallow IV glucose (20-50ml of 20-50% dextrose) OR glucagon (1mg by IM injection)) For children: 0.2g/kg dextrose
  - ➢ Buccal cavity: can apply commercial viscous glucose gel (can also use jam or honey) NOT TO USE IF PATIENT UNCONSCIOUS
  - ➢ As soon as the patient is able to swallow, give glucose orally

Diabetic Ketoacidosis (DKA) - arise from poorly controlled T1DM

- A serious problem. Can cause mortality (5-10%)
- Insulin deficiency + increase in counter regulatory hormones (glucagon, cortisol, growth hormone and catecholamines)
- Increased lipolysis and metabolism of free fatty acids results in ketogenesis and leads to subsequent metabolic acidosis
- Diagnosis:
  - ➢ Ketonaemia > 3.0 mmol/L or significant ketonuria
  - ➢ Blood glucose > 11.0 mmol/L
  - ➢ Bicarbonate (HCO_3^-) < 15 mmol/L and/or venous pH <7.3
- Cardinal biochemical features: Hyperglycemia, hyperketonemia, metabolic acidosis