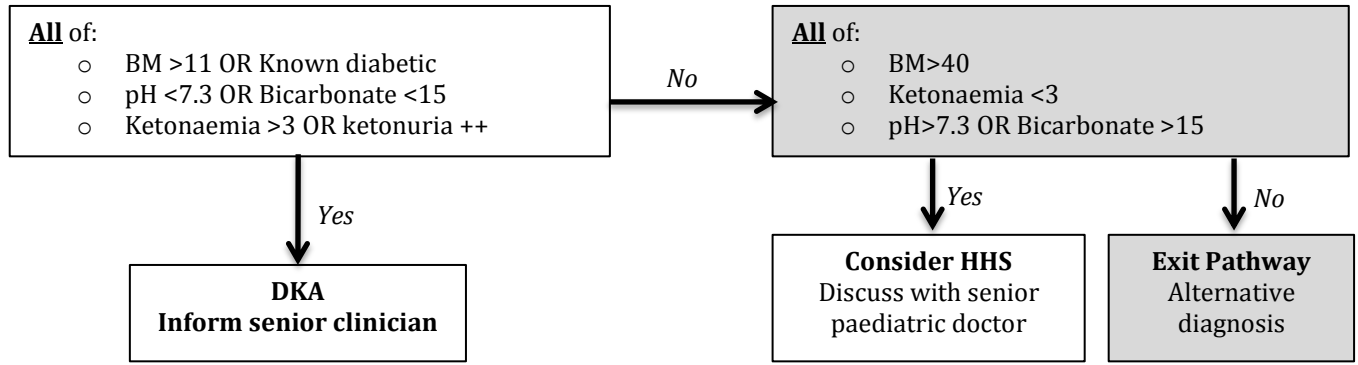


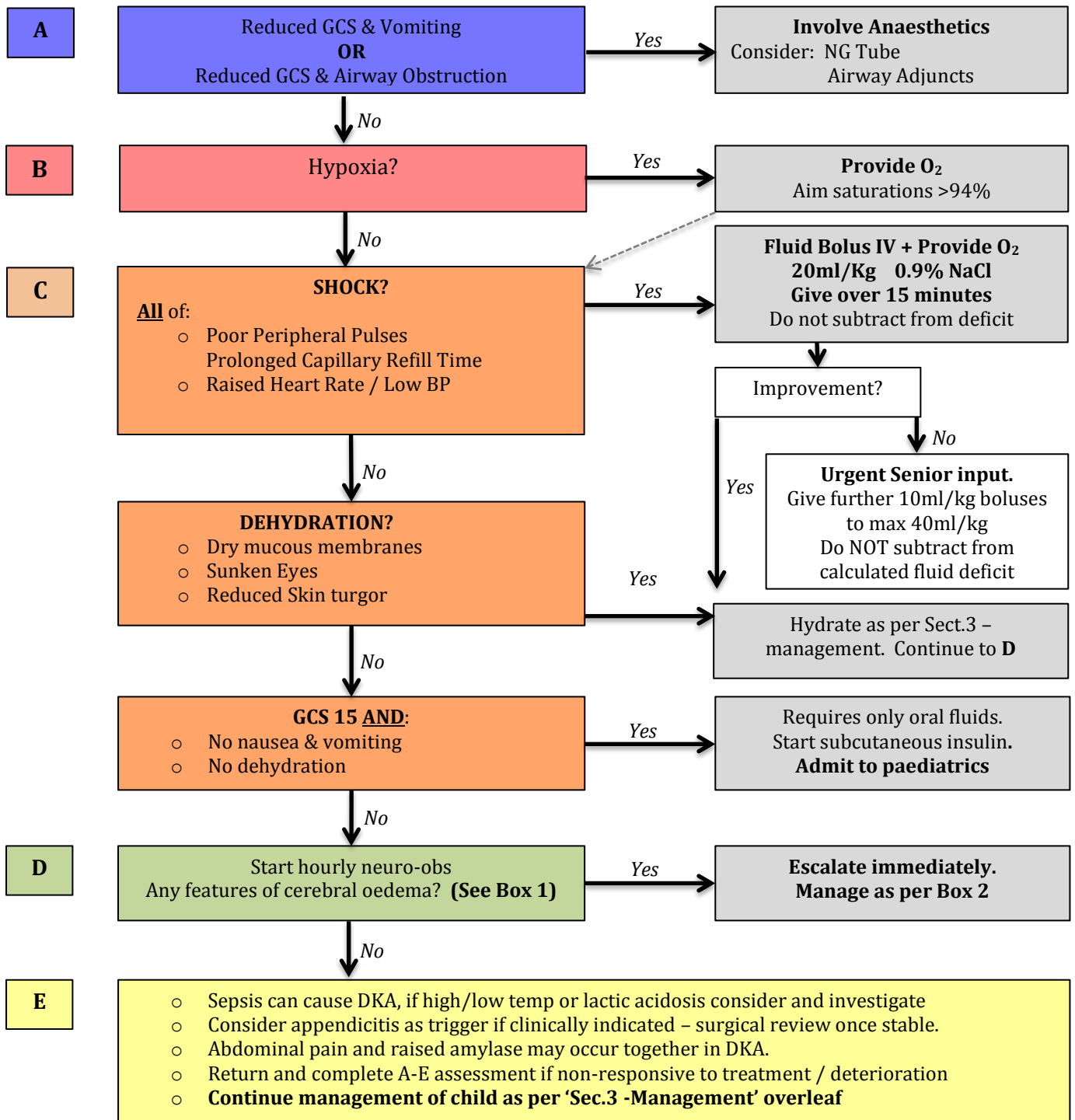
Managing Diabetic Ketoacidosis in children and young adults <18 years old

Sec.1 D I A G N O S I S



Obtain: History, Weight, ECG, Blood (Capillary/Venous gas, FBC, U&E, Glucose, ketones), A to E Assessment

Sec.2 A S S E S S M E N T



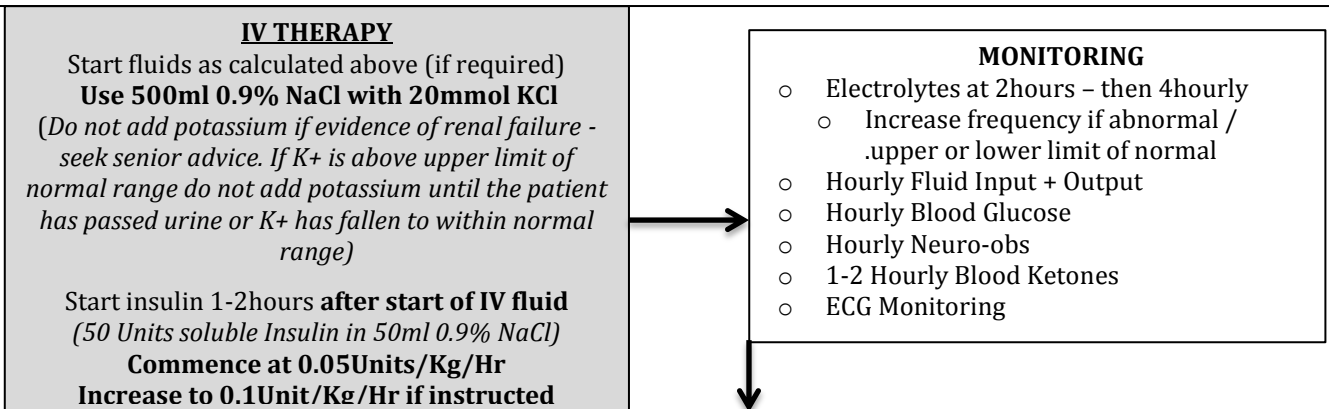
Managing Diabetic Ketoacidosis in children and young adults <18 years old

INTRAVENOUS FLUIDS

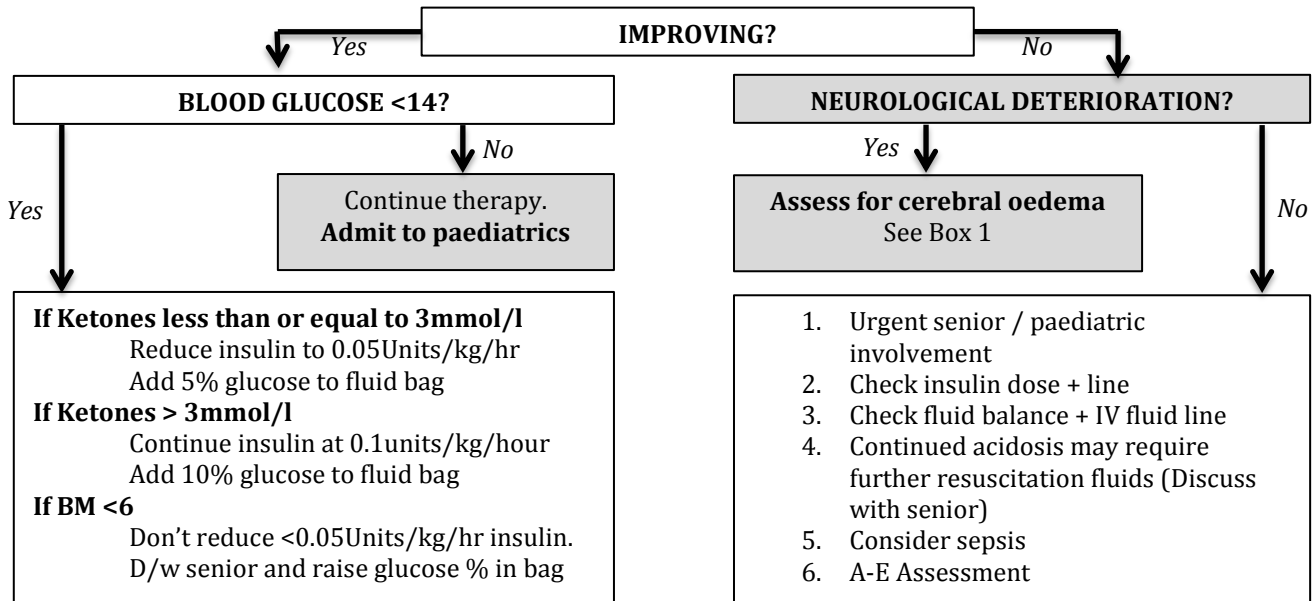
48 Hour Fluid requirements = (Deficit **MINUS** Fluid Bolus(not bolus for shock)/48) **PLUS** Maintenance/24 = ml/hr

<p>DEFICIT over 48 hrs If blood pH < 7.1 = 10% Deficit If blood pH 7.1-7.19 = 7% deficit If blood pH 7.2-7.29 = 5% Deficit</p> <p>Weight (kg) = fluid volume (L) 20kg child = 20L 5% deficit = 1L =1L over 48 hrs = 21ml/hr</p>	<p>FLUID BOLUS All NON SHOCKED patients requiring iv fluids should receive 10ml/kg bolus of 0.9% NaCl over 60 minutes</p> <p>This should be deducted from 48 hr fluid total Resus boluses given for shock (overleaf) to max 40ml/kg should NOT be deducted</p>	<p>MAINTENANCE over 24 hrs 1st 10kg body wt = 4ml/kg/hr 2nd 10kg body wt = 2ml/kg/hr Each add'l kg wt = 1ml/kg/hr</p> <p>Max weight of 80kg to be used Note - Give <u>no</u> oral fluids. Subtract any PO fluids given from 48 hour total</p>
---	---	---

E.g 20Kg child, pH 7.18, NOT SHOCKED receiving 10ml/kg fluid bolus (rounded down to full ml)
 = Deficit (29ml/hour) - Fluid Bolus (4ml/hour) + Maintenance (60ml/hour) = 85ml/hour



Sec.3
M
A
N
A
G
E
M
E
N
T



BOX 1
 ASSESSING FOR CEREBRAL OEDEMA

Assess immediately if any of:

- Headache
- Agitation / Irritability
- Unexpected fall in heart rate
- Increased blood pressure

Discuss with senior paediatric doctor and treat if any of:

- Deterioration in GCS
- Breathing pattern abnormality (excluding Kussmaul)
- Oculomotor Palsy
- Abnormal posturing
- Pupillary dilation / inequality

BOX 2
 MANAGING CEREBRAL OEDEMA

- Urgent senior input
- ½ maintenance fluids

Give either:

Mannitol
 20% 0.5-1g/Kg
 Given over 15mins
 OR

Hypertonic saline
 2.7% / 3% - 2.5-5ml/kg
 Given over 10-15mins