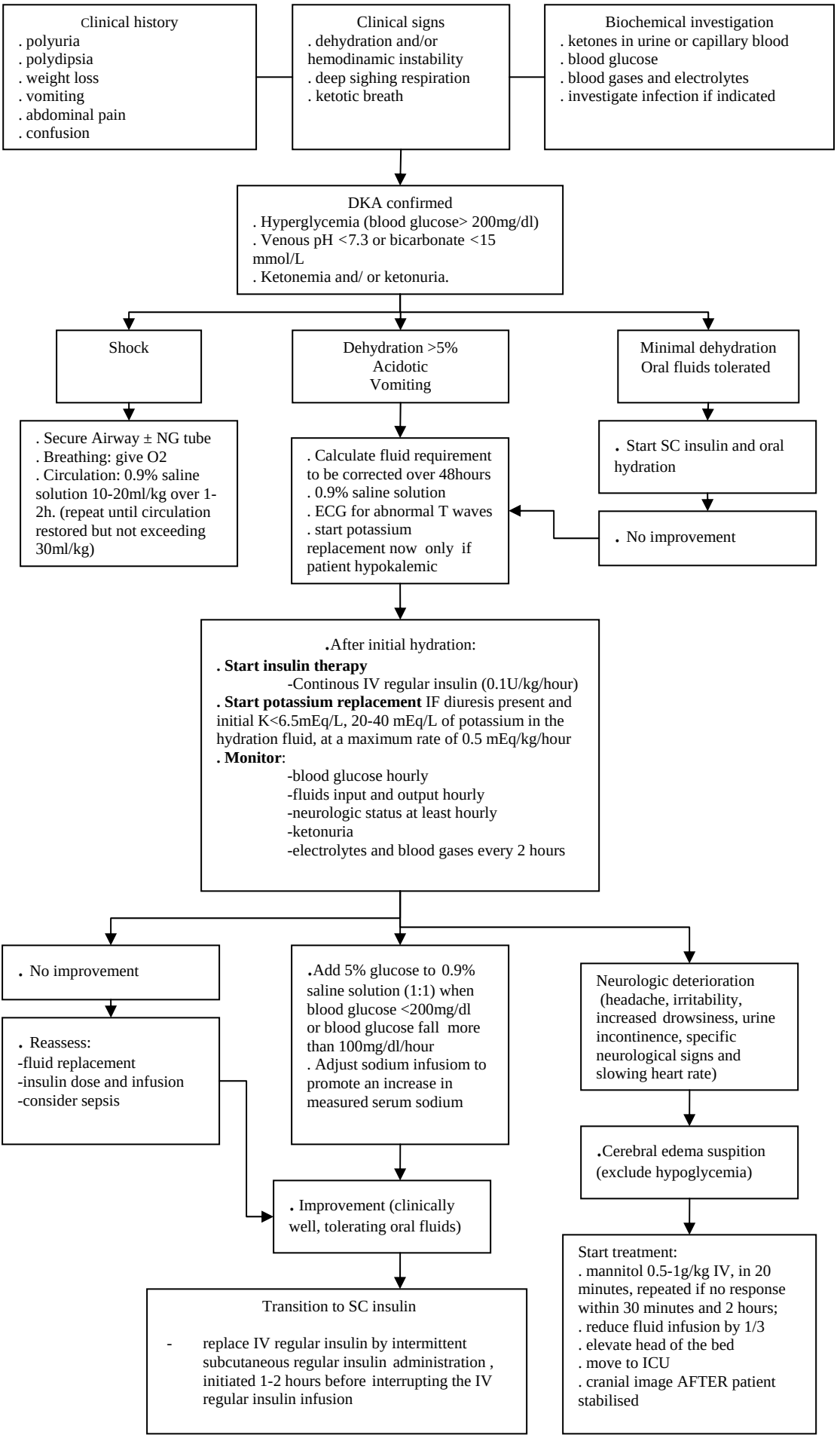
Clinical history
. polyuria
. polydipsia
. weight loss
. vomiting
. abdominal pain
. confusion
Clinical signs
. dehydration and/or hemodinamic instability
. deep sighing respiration
. ketotic breath
Biochemical investigation
. ketones in urine or capillary blood
. blood glucose
. blood gases and electrolytes
. investigate infection if indicated
DKA confirmed
. Hyperglycemia (blood glucose> 200mg/dl)
. Venous pH <7.3 or bicarbonate <15 mmol/L
. Ketonemia and/ or ketonuria.
Shock
Dehydration >5%
Acidotic
Vomiting
Minimal dehydration
Oral fluids tolerated
. Secure Airway ± NG tube
. Breathing: give O2
. Circulation: 0.9% saline solution 10-20ml/kg over 1-2h. (repeat until circulation restored but not exceeding 30ml/kg)
. Calculate fluid requirement to be corrected over 48hours
. 0.9% saline solution
. ECG for abnormal T waves
. start potassium replacement now only if patient hypokalemic
. Start SC insulin and oral hydration
. No improvement
.After initial hydration:
. Start insulin therapy
-Continous IV regular insulin (0.1U/kg/hour)
. Start potassium replacement IF diuresis present and initial K<6.5mEq/L, 20-40 mEq/L of potassium in the hydration fluid, at a maximum rate of 0.5 mEq/kg/hour
. Monitor:
-blood glucose hourly
-fluids input and output hourly
-neurologic status at least hourly
-ketonuria
-electrolytes and blood gases every 2 hours
. No improvement
. Reassess:
-fluid replacement
-insulin dose and infusion
-consider sepsis
.Add 5% glucose to 0.9% saline solution (1:1) when blood glucose <200mg/dl or blood glucose fall more than 100mg/dl/hour
. Adjust sodium infusiom to promote an increase in measured serum sodium
Neurologic deterioration (headache, irritability, increased drowsiness, urine incontinence, specific neurological signs and slowing heart rate)
.Cerebral edema suspition (exclude hypoglycemia)
Start treatment:
. mannitol 0.5-1g/kg IV, in 20 minutes, repeated if no response within 30 minutes and 2 hours;
. reduce fluid infusion by 1/3
. elevate head of the bed
. move to ICU
. cranial image AFTER patient stabilised
. Improvement (clinically well, tolerating oral fluids)
Transition to SC insulin
- replace IV regular insulin by intermittent subcutaneous regular insulin administration , initiated 1-2 hours before interrupting the IV regular insulin infusion