

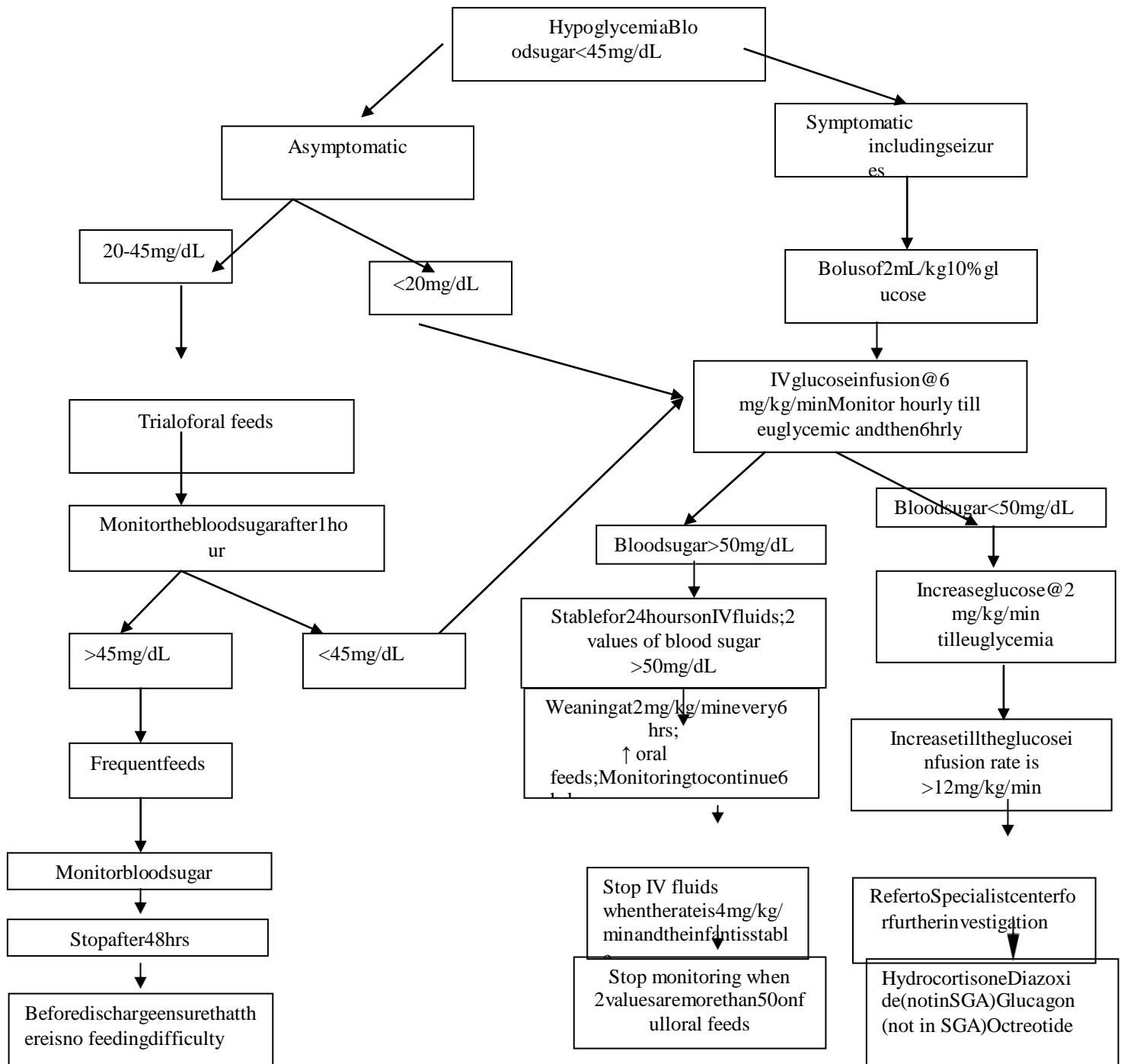
HYPOGLYCEMIA

- WHO defines hypoglycemia as BGL of less than 45 mg/dL (2.2 mmol/L).
- **Asymptomatic hypoglycemia** is diagnosed if BGL is less than 40 mg/ dL (to be confirmed by laboratory estimation) and the infant does not manifest any clinical features
- **Symptomatic hypoglycemia** should be diagnosed in hypoglycemia (BGL is less than 40 mg/ dL) with clinical symptoms. Therefore, careful evaluation should be done to look for all possible causes of signs and symptoms.
- **Signs of hypoglycemia** :stupor , jitteriness , tremors , apathy, episodes of cyanosis , convulsions , intermittent apneic spells or tachypnea , weak and high pitched cry , limpness and lethargy , difficulty in feeding and eye rolling .

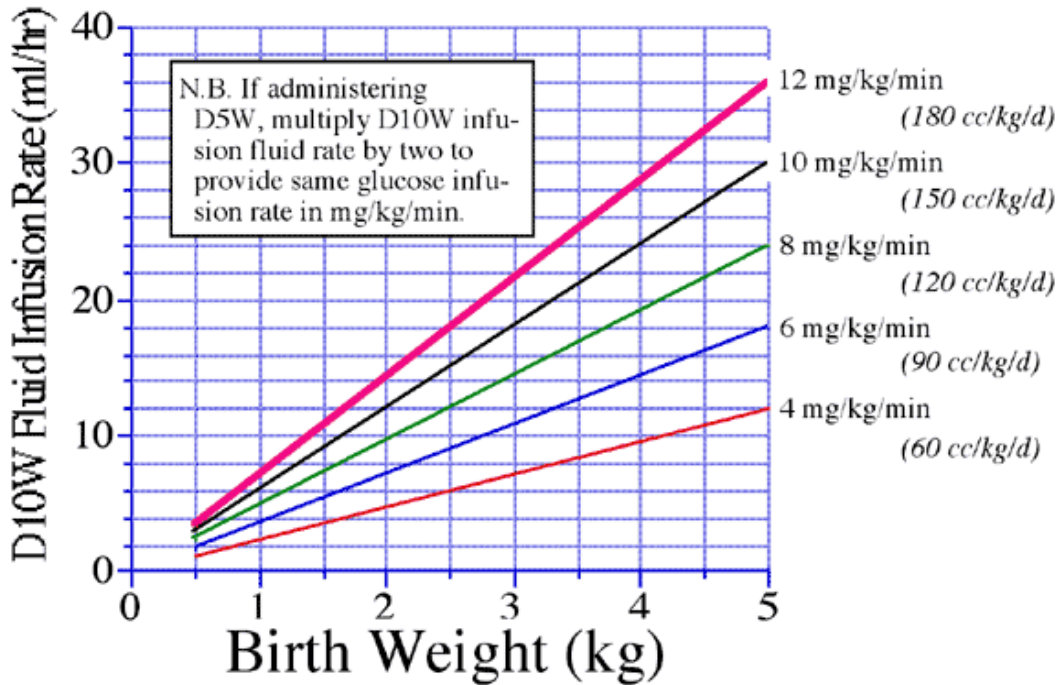
(Episodes of sweatings, sudden pallor , hypothermia and cardiac arrest have also been reported)

Drug	Dose	Route	Mode of action	Side effects
Hydrocortisone	5mg/KG/day BD	PO/IV	Reduces peripheral glucose utilization Increases gluconeogenesis Increases glucagon effect	Hyperglycemia, Hypertension
Diazoxide	5-15 mg//kg/day	PO	K channel agonists	Fluid retention , hypertrichosis Cardiac failure
Octreotide	5-34 mcg/kg/day TDS/QID	SC	Somatostatin analogue inhibits insulin secretion	Cholelithiasis,transient growth impairment,tachyphylaxis
Glucagon	0.2 mg/kg	SC or IM	Glycogenolysis,increased gluconeogenesis	Nausea,, vomiting , skin ,rash,rebound hypoglycemia.

Algorithm for management of neonatal hypoglycemia



i.v. Glucose Infusion Rates



This graph may be used in your management of neonates as an aid for determining:

1. The i.v. rate needed to achieve a desired glucose infusion rate, i.e., in mg/kg/min as is needed for writing orders; or
2. determining the glucose infusion rate of an existing i.v. to determine an infant's caloric intake.

As an example, a 2.5 kg infant whom you would like to have receive 6 mg/kg/min of glucose should be receiving 9.5 cc/hr of D10W (equivalent to 90 cc/kg of i.v. fluid).