Class: Sugar (carbohydrate), used for energy

Indications:
1. Hypoglycemia (insulin shock)
2. Unexplained LOC
3. Known diabetic patient with life-threatening complications (status epilepticus, cardiac arrest)
4. Coma or seizures of unknown origin

Side effects: Phlebitis, especially if given too fast or in too small a vein

Precautions:
1. Intracranial hemorrhage and hypoglycemia
2. CVA and hypoglycemia

Contraindications:
1. Intracranial hemorrhage without hypoglycemia
2. CVA without hypoglycemia

Dosage:
- D50—12.5-25 grams slow IVP; may be repeated once
- D25—0.5-1 gram/kg IV/IO (2-4 mL/kg)
- D10—0.5-1 gram/kg IV/IO (5-10 mL/kg)

Administration:
1. IV slow push (over 1-3 minutes)
2. Never give IM or SQ because of tissue irritation and possible necrosis
3. Analyze glucose level before administration, if possible
4. Analyze glucose level after administration to judge effects

Miscellaneous:
- Action:
  o Onset: 1 minute
  o Peak: 5-10 minutes
- D50 may precipitate severe neurological symptoms (Wernicke’s encephalopathy) in thiamine deficient patients (i.e. alcoholics). Treat with 100 mg Thiamine prior to administration of D50 (if allowed by protocol)
- Patient should consume high carbohydrate and protein “meal” within 30 minutes of glucose administration to prevent additional hypoglycemic episodes
- To make D25—mix 1 part D50 with 1 part normal saline
- To make D10—mix 1 part D50 with 4 parts normal saline