D-GLUCOSE / GLUCOSE (DEXTROSE 50% and 25%)

Escambia County, Florida - ALS/BLS Medical Protocol

ACTIONS

A monosaccharide, which provides calories for metabolic needs, spares body proteins and loss of electrolytes.

Readily excreted by kidneys producing diuresis. Hypertonic solution.

INDICATION

Hypoglycemia

Coma of unknown origin.

CONTRAINDICATIONS

1. Intracranial or intraspinal hemorrhage.

2. DTs with dehydration.

3. Blood glucose level > 60 mg/dl.

ADVERSE REACTIONS AND SIDE EFFECTS

Cardiovascular: Thrombosis, sclerosing if given in small peripheral vein.

Local: Tissue irritation if infiltrates.

Others: Acidosis, alkalosis, hyperglycemia, and hypokalemia.
WARNINGS

May cause Wernicke-Korsakoff syndrome in acute alcohol intoxication - usually this is prevented by prior administration of Thiamine 100 mg IM or IV. Perform a glucose test (if possible) prior to administering Dextrose.

DOSAGE

Adult: (>8 years of age) 50 cc of a 50% solution; (25 gm) IV/IO.

If conscious, Glucose may be given orally (25 gm).

Pediatric: (<8 years of age) 2 ml/kg slow IV/IO of a 25% solution.

Newborn: 5 ml/kg IV/IO of 10% solution (dilute D50 4:1 with NS).