in 10% dextrose, 4.25% in 20% dextrose, 4.25% in 25% dextrose, 5% in 10% dextrose, 5% in 15% dextrose, 5% in 20% dextrose, 5% in 25% dextrose

Amino acid infusions/electrolytes: Aminosyn: 3.5%, 7%, 8.5%; Aminosyn II: 3.5%, 7%, 8.5%; FreAmine III: 3%, 8.5%; ProcalAmine: 3%; Travasol: 3.5%, 5.5%, 8.5%

Amino acid infusions/electrolytes/dextrose: Aminosyn II: 3.5% with electrolytes in 5% dextrose, 3.5% with electrolytes in 25% dextrose, 4.25% with electrolytes in 10% dextrose, 4.25% with electrolytes in 20% dextrose, 4.25% with electrolytes in 25% dextrose; amino acid infusions (hepatic failure): HepatAmine: 8%; Hepatasol: 8%

Amino acid infusions (high metabolic stress): Aminosyn-HBC 7%; Freamine HBC: 6.9%; amino acid infusions (renal failure): Aminosyn-RF: 5.2%; NephrAmine: 5.4%

Administer:

Continuous IV INFUSION route

- Up to 40% protein and dextrose (up to 12.5%) via peripheral vein; stronger sol requires central IV administration
- TPN only mixed with dextrose to promote protein synthesis
- Immediately after mixing under strict aseptic technique, use infusion pump, in-line filter (0.22 µm) unless mixed with fat emulsion and dextrose (3 in 1); use careful monitoring technique; do not speed up infusion; pulmonary edema, glucose overload will result

SIDE EFFECTS

CNS: Dizziness, headache, confusion, loss of concentration, fever

CV: Hypertension, HF/pulmonary edema, flushing, thrombosis

ENDO: Hyperglycemia, rebound hypoglycemia, electrolyte imbalances, hyperosmolar hyperglycemic nonketotic syndrome, alkalosis, hypophosphatemia, hyperammonemia, dehydration, hypocalcemia

GI: Nausea, abdominal pain, cholestasis

GU: Glycosuria osmotic diuresis

INTEG: Extravasation necrosis, phlebitis at inj site

INTERACTIONS

Individual Drugs

Decrease: Protein-sparing effects—tetracycline

Drug/Lab Test

Increase: LFTs, ammonia, glucose

Decrease: Potassium, phosphate, glucose

NURSING CONSIDERATIONS

Assess:

- Electrolytes (potassium, sodium, phosphate, chloride, magnesium, bicarbonate, blood glucose, ammonia, ketones)
- Renal/hepatic studies: BUN, creatinine, ALT, AST, bilirubin
- Weight changes, triglycerides before and after infusion; vit A level with renal disease
- **Inj site for extravasation:** redness along vein, edema at site, necrosis, pain, hard tender area; site should be changed immediately; discontinue infusion, culture tubing and sol
- **Sepsis:** chills, fever, increased temperature, if sepsis is suspected
- **For impending hepatic coma:** asterixis, confusion, uremic fetor, lethargy
- **Hyperammonemia:** nausea, vomiting, malaise, tremors, anorexia, seizures
- Change of dressing and IV tubing every 24-48 hr to prevent infection if chills, fever, other signs of infection occur

Evaluate:

- Therapeutic response: weight gain, decrease in jaundice with liver disorders, increased LOC

Teach patient/family:

- Reason for use of TPN
- To report chills, sweating at once; risk for infection is higher
- About infusion pump, how to care for tubing/site; and blood glucose

⚠ HIGH ALERT

amiodarone (Rx)

(a-mee-oh′da-rone)

Nexterone, Pacerone

Func. class.: Antidysrhythmic (class III)

Chem. class.: Iodinated benzofuran derivative