PHARMACY POLICY & PROCEDURES

Policy: 5.04

Subject: Total Parenteral Nutrition (TPN)

Purpose: To establish guidelines for a pharmacy coordinated total parenteral nutrition (TPN) admixture service.

Policy: The pharmacy department will prepare total parenteral solution (TPN) admixtures in the laminar air flow unit in the pharmacy. Development of guidelines for ordering and administering TPN solutions will be the responsibility of the medical staff acting through the Pharmacy and Therapeutics (P&T Committee).

1.0 TPN Orders
1.1 TPN orders from the physician will include the following information:
   1.1.1 Percent concentration of amino acids
   1.1.2 Percent concentration of dextrose
   1.1.3 Total amount of base solution for each order
   1.1.4 Total electrolytes, trace elements and vitamins for each order
   1.1.5 Number(s) of TPN solution

1.2 The Prescriber will reassess the patient’s nutritional requirements and rewrite the TPN order as follows;
   1.2.1 For acute and Medical Patients: daily. (Use form TPNOder.doc)
   1.2.2 For Skilled Level of Care Patients: every one to three days. (Use form SCCTPN.doc)

1.3 TPN’s are scheduled daily at 1800. New TPN orders written after pharmacy hours are not considered critical in nature, and will be prepared and available for administration at the next administration schedule.

2.0 TPN Profile
2.1 The total ions (both cations and anions) will be calculated and printed.
2.3 The TPN flowsheet will be placed in the medical record as a permanent document and a copy of the preparation sheet will be maintained in the pharmacy.

3.0 Delivery of TPN to Nursing Unit
3.1 The TPN solution(s) will be delivered to the nursing unit and placed in the unit refrigerator prior to the scheduled administration time(s).

4.0 Administration of TPN
4.1 Remove the TPN solution from the refrigerator one hour before needed.
4.2 Visually Check the TPN solution for any visible precipitate.
4.3 Check the concentration of the amino acid, concentration of dextrose, and quantities of additives on the label to make certain that the posting of the TPN flowsheet corresponds with the information on the TPN label.
4.4 TPN administration requires proper filter selection;
   4.4.1 Filter non-lipid containing TPN solutions with 0.2 micron filter.
   4.4.2 Filter 3 in 1 mixtures with a 1.2 micron filter.
4.5 TPN solutions and admixtures will be changed every 24 hours
4.6 Record time and date started, and initial on both “TPN Profile” and the TPN label when administering each solution.

5.0 TPN Label Information
5.1 TPN solutions are labeled with the following information:
   5.1.1 Last name, first initial, room number of patient
   5.1.2 IV number
   5.1.3 Total Volume
   5.1.4 Flow Rate
   5.1.5 Volume and concentration of amino acids
   5.1.6 Volume and concentration of dextrose
   5.1.7 Additives
   5.1.8 Time and date solution prepared
   5.1.9 Initials of pharmacist preparing the admixture

6.0 Changes in Admixture
6.1 Contact the pharmacy if changes or additions are made by the physician after the original order.
6.2 The pharmacy department will be responsible for making the changes in the TPN solution(s), label(s), and posting on “TPN Profile” for any solutions which have been prepared and are still in the unit refrigerator.
   6.2.1 Prepared bags will be replaced with new bags incorporating the changes.
6.3 No additions will be made to prepared bags

7.0 Charges for TPN Solutions
7.1 The pharmacy department will make the patient charge for each TPN solution, using the computer as for other IV solutions.

Originated by: Pharmacy
Effective: March 1978

Authorized by: Director of Pharmacy Services

Revision Date: 12/99, 10/10
Review Date: