

Parenteral Nutrition (PN) – Continuous vs. Cycled

Level III

Purpose	The purpose of this procedure is to explain the difference between continuous and cycled parenteral nutrition (PN) and to establish the guideline for tapering the rate of infusion when starting or stopping parenteral nutrition infusions.	
Definitions	1. Continuous Parenteral Nutrition – The PN is infused at the same rate for 24 hours a day. The solution bag and equipment are changed at approximately the same time each day. The system stays intact without interruption. 2. Cycled Parenteral Nutrition – The PN is infused for a shorter interval lasting less than 24 hours. The PN infuses for a time interval according to physician order. Many times this is done to accommodate resident schedules and allows for more freedom in lifestyle.	
General Guidelines	1. The nurse must have received training and demonstrated competency related to the handling of PN prior to performing this procedure. 2. Use aseptic technique at all times when administering PN. 3. Parenteral nutrition should be delivered by midline or central line, according to the concentration of dextrose. 4. Guidelines for tapering cycled parenteral nutrition are as follows: a. The rate tapers upward for 1-2 hours when starting the infusion. b. Then the PN runs at a set rate for a determined time. c. The rate tapers downward for 1-2 hours before the infusion is stopped or discontinued. d. The time intervals and tapering rates will be determined by the physician or the pharmacist. e. The bag is then disconnected from the catheter and discarded. f. The catheter is flushed with saline/heparin per protocol. 5. Never stop or discontinue parenteral nutrition suddenly. a. The PN rate must be tapered downward over several hours to allow the pancreas to adjust to the decrease in glucose intake (and the subsequent decreased need for insulin). This will help prevent hypoglycemia. b. Total parenteral nutrition (TPN) (>10% dextrose) orders should include dextrose 10% IV fluid to be used if for some reason the TPN has to be stopped suddenly or is not available. c. The Dextrose 10% should be run at the same rate that the TPN was running. The Dextrose 10% can be run on an IV flow regulator tubing until TPN and pump are available.	
References		
MDS (RAPs)	G1h; K3; K4; K5; K6 (RAP#12 Nutritional Status)	
Survey Tag Numbers	F325; F328	
Related Documents	Parenteral Nutrition	
Risk of Exposure		
Procedure Revised	Date:_____	By:_____
	Date:_____	By:_____
	Date:_____	By:_____
	Date:_____	By:_____