Olive View-UCLA MEDICAL CENTER

COUNTY OF LOS ANGELES
DEPARTMENT OF HEALTH SERVICES

Policy Title:	**ADULT PARENTERAL NUTRITION**		
Category:	1 - Provision of Care	**Policy No.:**	102
Originally Issued:	11/1/1992	**Update (U)/Revised (R):**	6/4/2019
Distribution:	**Hospital-Wide** ☒	**If not Hospital-Wide, Other:**	

PURPOSE:

To establish guidelines for the ordering, dispensing, and administration of Parenteral Nutrition (PN).

DEFINITION(S):

None

POLICY:

Adult patients who are unable to meet their nutrient needs through oral or enteral routes will be assessed to determine whether they should be provided Parenteral Nutrition support.

PROCEDURE:

PN Indications

Considerations for the use of PN should include the patient's nutritional status, GI function, and extent and severity of underlying disease. PN should only be initiated if the duration of therapy is anticipated to be at least 7-14 days as it is unlikely to be beneficial if administered for a shorter period of time.

A. GI tract is inaccessible.
B. Failed trial of EN after appropriate tube placement.
C. Enteral nutrition is contraindicated or the intestinal tract has severely diminished function due to underlying disease or treatment.
   - Paralytic ileus
   - Mesenteric ischemia
   - Small bowel obstruction
   - GI fistula except when enteral access may be placed distal to the fistula or volume of output supports a trial of EN (less than 200 mL/day)
   - Short bowel syndrome
D. Post-operative patients unable to eat or tolerate enteral nutrition within 7-10 days post-operatively.

PN Contraindications

A. Acute metabolic derangement.
B. Acute hemodynamic instability.
C. During surgery as fluid resuscitation.
D. Sustaining the terminally ill; e.g., patients with rapidly progressive disease which is not amenable to curative or palliative therapy.

Ordering PN

Adult PN solutions are ordered by a resident or faculty physician at Olive View UCLA Medical Center using the appropriate order form (see attached OV1676). A Registered Dietitian should be consulted prior to the initiation of PN.

A. All PN orders shall indicate:
    - Patient information (name, MRN/FIN, DOB, allergies, diagnosis, height in centimeters, weight in kilograms, PN indication, vascular access device)
    - Base solution (dextrose and amino acid content)
    - Solution route (central or peripheral)
    - Additives
    - Base electrolytes
    - Infusion schedule
    - Total volume
    - Lipids (if applicable). Fat emulsions are recommended for the following purposes:
        - To prevent essential fatty acid deficiency in patients receiving central route PN greater than 2 weeks
        - To provide additional caloric requirement in patients on peripheral formulas.
B. To avoid hyperglycemia, it is recommended that glucose daily load is increased gradually over several days.
C. Additional non-medication orders related to PN monitoring should be entered directly into the Electronic Health Record (EHR) by the ordering physician.
D. In the event that a PN solution is temporarily stopped, it is recommended that Dextrose 10% solution is infused at the same rate until the PN solution is restarted to avoid rebound hypoglycemia.
E. PN orders must be re-written entirely when any component of PN is changed.

Preparing and Dispensing PN

A. OV Pharmacy reviews, verifies and transmits order to contract pharmacy, Centralized Admixture Pharmacy Services (CAPS).
B. CAPS pharmacy compounds ordered PN and delivers to OV pharmacy, which then is delivered to patient unit for administration. PN solutions are stored in the refrigerator until use.
C. New orders for PN must be placed no later than 12:00 noon. Orders received after that time will be filled the next day.
D. Adult PN solutions are dispensed in a 24-hour bag. Labels are generated for pharmacy records and reviewed for accuracy. Quality control reports are provided by CAPS and reviewed by Pharmacy and Therapeutics Committee.

PN Administration

A. Infusion of PN solutions are infused starting at 20:00 daily, unless otherwise specified on the PN order.
B. The licensed nurse will verify the PN admixture against original physician order (see PPM Policy #240: High-Alert Medications).
C. New IV tubing with filter for PN administration will be attached to each sequential bag of PN solution. IV tubing must be changed every 24 hours. Infusion will be administered using a constant infusion pump.
D. No other IV solutions will be administered with PN except fat emulsions. The line of administration may only be used in an arrest situation for the delivery of emergency drugs, but the IV fluid must be changed to Normal Saline IV Solution. Never "catch up" solution volume, rate should be constant.

PN Monitoring

Procedure	Before PN	Daily	Weekly	Other
Consult to Dietitian	X			
Adjust IVF as needed	X			
Strict Intake and Output		X		
POC Blood Glucose				q 4 hr, q 6 hr, or other
Weight		X		
CMP	X	x3 days	X	
CBC w/ diff	X		X	
Liver Function Test	X		X	
Prealbumin	X		X	
Triglycerides (blood)	X		X	

Automatic Stop Orders

PN solution orders will have a 72-hour automatic stop. If no change in PN orders is needed within the 72 hours, pharmacy may take a verbal order from the provider to continue PN as ordered, and will document as such within the order comments section of the PN order in the EHR. The order will then be continued for an additional 72-hour renewal period, and the process repeated.

Transition to Home PN

For patients discharging home on PN, the primary inpatient service will consult Olive View's Home Health service for coordination of home health pharmacy, supplies, and outpatient monitoring.

ATTACHMENTS/FORMS:

TPN Form – Static 5.2016

REFERENCE(S)/AUTHORITY:

None

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