Allergies:

Height ________ Weight ________ lb / kg

*Peripheral parenteral nutrition (PPN) is a restricted item on hospital formulary. PPN use is restricted to patients in whom a central line is contraindicated.*

☐ Contraindication to central line:

A. Indication for PPN [check appropriate box(es) below]:

☐ Intractable nausea or vomiting
☐ Diffuse peritonitis
☐ Gastrointestinal obstruction
☐ Gastrointestinal ischemia
☐ Paralytic ileus
☐ Tube feeding intolerance

B. Timing of initiation and duration of PPN [check appropriate box below]:

☐ Inadequate oral or enteral intake for at least 4 days since hospital admission
(Patient is in CCU, MICU, MSICU, MTCU, STCU, or TSICU)
☐ Inadequate oral or enteral intake for at least 6 days since hospital admission
(Non-ICU)
☐ Expected duration of PPN is \[ \geq \] 5 days (ICU patient) or \[ \geq \] 7 days (Non-ICU patient)

C. If patient does not meet criteria in A and B above, one of the following must be present prior to ordering PPN:

☐ Nutrition Support Consult completed for “evaluation of PPN.”
☐ Patient is less than 18 years old.
☐ Patient was receiving TPN as outpatient prior to admission.
☐ Patient has hyperemesis gravidarum.

D. Monitoring and Administration

1. Nutrition Support Consult

2. Baseline lab studies in a.m. (EA), then every Monday.
   - Lytes, Glucose, Triglycerides, Prealbumin, Albumin
   - BUN, Creatinine, Ionized Ca, Mg, PO4, Liver Function Panel

3. Keep line patent with D5 (at same rate as PPN) if PPN runs out or is interrupted.

4. PPN may be discontinued only by physician order.

5. Record total I & O q 8 hours.


7. Weigh patient daily and chart weights.

Physician’s Signature:

YORK HOSPITAL     YORK, PA
PHYSICIAN’S TREATMENT RECORD
PERIPHERAL PARENTERAL NUTRITION (PPN) ORDERS
Form 5249-PPN R-11/09
CAVEATS OF PERIPHERAL PARENTERAL NUTRITION (PPN)

Parenteral nutrition administered through a central line [often referred to as total parenteral nutrition (TPN)] is preferred over PPN because it is nearly impossible to meet patients’ caloric needs with PPN alone. TPN also allows for customization of macronutrients (amino acids, carbohydrates, and lipids), whereas the macronutrients in PPN lack manipulation due to osmolarity restrictions.

BENEFITS AND RISKS OF NUTRITION SUPPORT

Many studies have assessed the effects of PN vs. EN on various outcomes in diverse patient populations. Almost all outcome studies from clinical trials comparing PN with EN in acutely ill adults with functioning GI tracts fail to show improved outcomes from PN. Additionally, in many patient groups EN resulted in significantly reduced rates of infection, sepsis, length of stay in the hospital, and costs. The available evidence supports the use of EN over PN in inpatients with functioning GI tracts.

Benefits of Enteral Nutrition (EN)
- Ease and safety of administration
- More physiologic
  - Maintenance of GI integrity
  - Decreased bacterial translocation
- More economical
- Decreased risk of infectious complications and sepsis compared to PN

Complications of Enteral Nutrition (EN)
- Displaced or clogged feeding tubes
- Aspiration of enteral feeding formula
  - Risk decreased by raising HOB 30° to 45° and utilization of post- pyloric feeding tubes in patients at high risk for aspiration
- Diarrhea
  - Hyperosmolar enteral formulas-minor cause
  - Medications formulated in sorbitol-containing elixirs-major cause

Benefits of Parenteral Nutrition (PN)
- May be easier to reach caloric goals

Complications of Parenteral Nutrition (PN)
- Mechanical
  - Pneumothorax (related to line placement)
  - Catheter-related thrombosis
  - Catheter-related phlebitis
- Metabolic
  - Hyperglycemia and hypoglycemia
  - Refeeding syndrome
  - Acid-base abnormalities
  - Hypertriglyceridemia
  - Hypercapnia
  - Hepatobiliary complications (hepatic steatosis and cholestasis)
- Infectious
  - Catheter-related blood stream infections
  - Increased risk of fungemia

References
1. Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients. JPEN 2002; 26 (1, Suppl. ): 1SA-138SA.