

# Unit 1: Parenteral Nutrition

## ONLINE CONTENT (0.5 H)

### Unit Objectives:

- Select appropriate nursing interventions to manage common problems and needs of critically ill patients. (1,6,)\*
- Explain the indications, complications, and nursing management related to the use of parenteral nutrition. (1,2)\*

\*Course Objectives

### Assignment:

Review the required TPN/PPN document and section in the book as described in the course outline and place your answers to the following questions in the Unit 1: TPN/PPN dropbox by **0800 on 1/12/2024**.

*In order to receive full credit (0.5H class time) for this assignment, it must be completed in its entirety by the due date/time assigned. Any assignment not completed in its entirety will result in missed class time.*

1. What are some important components to include in a nutritional assessment?
  - Dietary history
    - Signs of decreased food intake, and increased requirements (wound or injury healing, sickness/disease)
  - Signs of poor nutrition
    - Dry skin, brittle nails, hair loss, decreased muscle mass, weakness, poor oral hygiene (dryness, caries) poor skin turgor, loose dentures/clothing
  - Social history, allergies, personal preference
    - Religious restrictions (Halal, Kosher)
  - Anthropomorphic measurements
    - Fat and muscle content
    - Height, weight, BMI
    - Skinfold thickness and muscle circumference (arms)
      - Compared to standards for age/sex.
2. What are the indications for TPN?
  - Long term therapy of 3+ weeks
  - Allow bowel rest and healing
  - Promotes tissue synthesis/wound healing
  - Reduces pancreas activity
  - Provides large amounts of calories and nutrients (2000-2500/day)
3. What are potential labs that may be ordered on the patient receiving TPN or PPN?
  - CMP
    - K+
    - Ca
    - BUN & creatinine (kidney function)
    - Total protein
    - ALP, ALT, AST (liver function)
  - Blood Gases
    - May be ordered if metabolic acidosis is suspected

- CBC
  - WBC counts
    - Is sepsis is suspected
      1. TPN “meals on wheels for bacteria”
  - Blood Cultures
    - If sepsis is suspected, find best treatment for bacteria causing infection
- 4. How frequently should the TPN tubing be changed?
  - Every 24 hours
- 5. Match the common central line catheter problems with the correct nursing action.

\_\_\_ b \_\_\_ Clotted Catheter

\_\_\_ c \_\_\_ Cracked tubing

\_\_\_ d \_\_\_ Dislodged catheter

\_\_\_ a \_\_\_ Infusion too rapid

- a. Use infusion pump, check rate, check pump
- b. Use alteplase as ordered
- c. Clamp tubing between patient and point of air entry
- d. Remove catheter and apply sterile pressure dressing