Chapter 101 – Enteral Nutrition

Chapter 101, Self-Assessment Questions

1. Which of the following statements is true regarding GI tract structure and function?
   A. The process of digestion begins in the stomach.
   B. The pyloric sphincter separates the esophagus from the stomach.
   C. The liquid form of food produced in the stomach is known as chyme.
   D. Most protein, carbohydrate, and fat absorption occurs in the duodenum.
   E. The pancreas secretes large amounts of acid important for digestion of food.

2. Which of the following would most appropriately be considered a contraindication to EN?
   A. Nasopharyngeal tumor
   B. Inflammatory bowel disease
   C. Mild to moderate pancreatitis
   D. Closed head injury
   E. Diffuse peritonitis

3. Which of the following initial goal regimens would, according to general guidelines, be most appropriate for a 100-kg hospitalized patient with a body mass index of 33 kg/m²?
   A. 1200 kcal (5023 kJ) and 100 g of protein
   B. 1400 kcal (5860 kJ) and 120 g of protein
   C. 1800 kcal (7534 kJ) and 80 g protein
   D. 1800 kcal (7534 kJ) and 120 g protein
   E. 2400 kcal (10,046 kJ) and 100 g protein

4. Which of the following initial goal regimens would, according to general guidelines, be most appropriate for a 60-kg hospitalized patient with a body mass index of 22 kg/m²?
   A. 1000 kcal (4186 kJ) and 90 g of protein
B. 1200 kcal (5023 kJ) and 40 g of protein
C. 1800 kcal (7534 kJ) and 90 g of protein
D. 2400 kcal (10,046 kJ) and 60 g of protein
E. 2,400 kcal (10,046 kJ) and 120 g of protein

5. Which of the following is most accurate regarding specialized nutritional support?
   A. There is no good evidence to demonstrate benefit of starting therapy within the first 2 days of intensive care.
   B. Malnutrition before illness may be a good indication for starting therapy sooner.
   C. Most patients requiring specialized nutritional support should be provided 35 to 40 kcal (147–167 kJ) per kg of body weight per day.
   D. It is more difficult to overfeed patients with PN compared with EN.
   E. A benefit of PN compared with EN is more efficient prevention of bacterial translocation.

6. Which of the following best describes aspiration in patients receiving tube feedings?
   A. Risk reduced if tip of tube is proximal to ligament of Treitz
   B. Often caused by aspiration of nasopharyngeal secretions rather than feedings
   C. Can be decreased by decreasing angle of head of bed to less than 30 degrees
   D. Incidence less with NG tubes than with PEG tubes
   E. Can eliminate by use of postpyloric feedings

7. Which of the following best describes methods of delivery of EN?
   A. Bolus feedings are appropriate for delivery of duodenal feedings.
   B. Intermittent feedings are appropriate for delivery of jejunal feedings.
   C. Either bolus or continuous feedings are appropriate for delivery of gastric feedings.
D. An advantage of a PEJ tube compared with a PEG tube is ease of placement.

E. Most PEG tubes are placed by a surgeon during abdominal surgery.

8. Which of the following best describes EN for patients with renal dysfunction?

A. Products used in this population generally have low caloric density.

B. Products used in this population generally have lower amounts of potassium, phosphorus, and magnesium compared with standard EN products.

C. Products designed for patients receiving dialysis are generally relatively low in protein.

D. Formulas enriched with essential amino acids are the most commonly used products in this population.

E. Use of standard EN formulas should be avoided in dialysis patients because of the non–essential amino acid content.

9. Which of the following is true regarding EN in patients with hemodynamic instability?

A. Gastric feedings are strictly contraindicated in patients on any dose of vasopressor.

B. Gastric feedings at low rates may be trialed in patients on low, stable dosages of vasopressors.

C. Jejunal feedings are safer compared to gastric feedings in patients on vasopressors.

D. A polymeric formula would more likely be tolerated compared to an elemental formula in a patient on high-dose vasopressors.

E. EN can be initiated in patients on high dosages of phenylephrine but should be avoided if the patient is receiving vasopressin.

10. EN formulas designed to alleviate hepatic encephalopathy contain which of the following amino acid profiles compared to standard formulas?
A. Fewer BCAA and more AAA
B. Fewer AAA and more BCAA
C. Fewer BCAA and same amount of AAA
D. Fewer AAA and same amount of BCAA
E. Fewer BCAA and fewer AAA

11. Which of the following types of feeding tubes is most commonly placed in patients requiring long-term EN?
   A. Nasogastric
   B. Orogastric
   C. Nasojejunal
   D. PEG
   E. PEJ

12. Which one of the following statements is true regarding components of EN?
   A. Soluble fiber is omitted from most formulas due to propensity to cause abdominal discomfort.
   B. Standard protein content of EN formulas is about 30% of total calories.
   C. Formulas containing simple sugars are lower in osmolality than those containing maltodextrin.
   D. MCT oil does not provide EFAs.
   E. A liquid MVI supplement is generally required for patients on EN due to inadequate content in the EN formula.

13. Which of the following is best practice for EN?
   A. The best fluid for flushing feeding tubes is diet soda.
B. When administering medications through a feeding tube, 5 mL of water should be used as a flush between medications.

C. Before and after medication administration down a feeding tube, 10 to 30 mL of fruit juice should be used to flush the tube.

D. Antacids should routinely be placed down jejunal tubes to decrease acidity of the lower small intestine.

E. Tube feedings should be stopped for 2 hours before and 2 hours after tube administration of most medications.

14. Which of the following would be most likely to develop in an EN patient experiencing acute renal insufficiency?
   
   A. Hypernatremia
   
   B. Hypocalcemia
   
   C. Hypomagnesemia
   
   D. Hypophosphatemia
   
   E. Hyperkalemia

15. Absorption of which of the following medications has most commonly been reported to be compromised in patients receiving EN?

   A. Itraconazole
   
   B. Metoclopramide
   
   C. Sorbitol
   
   D. Sucralfate
   
   E. Phenytoin
Answers

1. C
2. E
3. B
4. C
5. B
6. B
7. C
8. B
9. B
10. B
11. D
12. D
13. B
14. E
15. E