

Children's Wisconsin Clinical Nutrition Department



Module Parenteral Nutrition: Parenteral Nutrition #1 Pre-Test

1. **True/False** Premature infants require a source of nutrition, typically parenteral nutrition by DOL 3.
True
2. **True/False** When starting parenteral nutrition, you should always have an indication of why it is needed.
True
3. What are the main differences between 2 in 1 and 3 in 1 mixtures?
2 in 1 is infused with separate lipids
 - a. What is main advantage of a 2 in 1 solution in pediatrics/neonates?
Lower pH, therefore increased calcium/phosphorus compatibility
4. What are the limitations in using peripheral parenteral nutrition (PPN)? Is it commonly used in pediatrics?
Not commonly used, Max 12.5% dextrose, low calcium content, large volume required, low osmolarity required
5. What are the types of macronutrients available for use in TPN?
 - Carbohydrate: **Dextrose**
 - Protein: **Premasol/Trophamine, Travasol**
 - Fat: **Intralipid, Smoflipid, Omegaven**
6. How many calories per gram do each of the macronutrients contain?
 - Carbohydrate: **3.4 kcal/g**
 - Protein: **4 kcal/g**
 - Fat: **10 kcal/g**
7. What is a reasonable distribution of macronutrients when starting a TPN?
 - Carbohydrate: **~50%**
 - Protein: **15-20%**
 - Fat: **30-40%**

8. How do you calculate GIR (Glucose Infusion Rate)?

Milligrams carbohydrate/kg body weight/minutes of infusion

9. True/False Fluid requirements for a patient should be calculated before calories.

10. True/False Children's Wisconsin uses different amino acid mixtures depending on the age of the patient.

11. What is Smoflipid? When/why would we consider using it?

Contains soy, MCT, olive and fish oils, therefore contains omega 3 fatty acids

>4 weeks PN, direct bili >2, short gut, on product at home

12. What is Omegaven? When/why would we consider using it?

100% fish oil, consider use when direct bili remains >2 on Smoflipid

SO IS THIS MORE FOR SHORT TERM USE WITH DIRECT BILI OVER 2 or is this if SMOFLIPID STILL GENERATES A DIRECT BILI OVER 2

13. How do you determine what type of amino acid preparation to use at CW?

Premasol = birth-12 months of age

Travasol = greater than 12 months of age

14. In what locations are resources to help you with parenteral nutrition located?

Q:GI/TPN

15. What is the name of the outpatient/home TPN order?

Home Supply TPN 3 in 1

BUT ALL TPNS AT CW ARE 2 IN 1'S?

IF PATIENTS PREFER, COULD THEY GO HOME ON 2 IN 1 TPN?

16. Where can you find a resource that walks you through how to do a home TPN order?

Learning Home: Home Supply TPN 3 in 1

