Home Total Parenteral Nutrition (TPN)

Your child’s medical treatment plan includes giving TPN and lipids for nutrition. TPN (protein, sugar, vitamins, minerals and electrolytes) and lipids (fat) provide nutrition through your child’s central IV catheter. TPN provides all or part of your child’s nutritional needs when he is not able to use his intestinal tract to digest and absorb all of his nutrition. The home caregivers need special training is needed in order to safely administer TPN at home. You will be working closely with the Nutrition Support Team and a home infusion company while our child is receiving TPN at home.

**The TPN Infusion Schedule:**

The nutrition support team will decide the schedule to follow for giving TPN at home. The home care company will program the pump for rate of infusion, hours of infusion, and how to slowly stop the infusion. The TPN schedule may change depending on your child’s needs.

**How to Administer TPN:**

1. The TPN will be mixed by the home care company’s pharmacy. They will usually mix and deliver a week’s supply of TPN at a time. It needs to be kept refrigerated until you are ready to use it as instructed.

2. The home care company’s nurse will show you how to start the TPN. There will usually be medications you will need to add to the bag just before you start the TPN.

3. Always wash your hands carefully (as instructed) before handling TPN and/or equipment.

4. Be sure to check that the TPN bag is slowly becoming empty as the infusion continues. Also watch for blood backing up into the tubing or air in the tubing.

5. Never use a bag of TPN for more than 24 hours.

6. Do not use the TPN if it is discolored, the fluid is separated into layers of clear fluid and white fluid, or the bag leaks.

**Complications to Watch For:**

1. **Hyperglycemia (high blood sugar)**
   
   - Watch your child for increased thirst, increased urination, and increased hunger.
   
   - Check your child’s urine glucose (sugar) _____ hours after starting the TPN.

   **How to Test Urine for Glucose:**

   a. Have your child urinate into a container or directly on the colored squares on the dipstick. For a child in a diaper, place 1 to 2 cotton balls in the diaper to help catch the urine.

   b. If the urine is in a cup, dip the end of the dipstick with the colored squares into the urine. Remove the dipstick and tap off the excess urine.
c. Read the dipstick after 30 seconds. Compare the colored square to the chart on the bottle. If the result is:

- Negative or 100 – it is fine.
- 250 – check the urine glucose again the next time your child urinates.
- Over 250 – call ________________________________.

Special Instructions:

________________________________________________________
________________________________________________________
________________________________________________________

2. Hypoglycemia (low blood sugar)

Watch your child for shakiness, irritability, drowsiness, nervousness or hunger. Be sure to watch for these signs especially within one hour of weaning off TPN, or if the TPN should be suddenly stopped.

- Give your child something high in sugar (like frosting, orange juice, and soda pop with sugar) when signs of low blood sugar are noticed.
- If your child also has enteral tube feedings, make sure the formula is given if TPN is suddenly stopped.

3. Fluid overload (too much fluid)

Watch for puffiness of your child's hands, feet, and face.

4. Dehydration (too little fluid)

Watch for dark, concentrated urine; little or no urine; dry mouth; excessive thirst.

5. Fever – greater than or equal to 101° F (38.3° C)

**Follow-Up Information:**

Your child has an appointment in the _____________________________ Clinic on _____/_____/_____ at _________________ with ______________________________.

Your child’s current TPN schedule is _______ hours per day, _______ days per week.

**Who to Call for Problems:**

- The nutrition support nurse at (_______) _______-__________ (Monday through Friday) or ________________ at (_______) _______-__________ (after hours and on the weekends) if your child has:
  1. Fever – greater than 101° F (38.3° C)
  2. Vomiting
  3. Diarrhea
  4. Hyperglycemia or hypoglycemia
  5. Fluid overload or dehydration
• Your home care company at (______) ______-__________ for TPN bags and supplies, and problems with your child's infusion pumps.

• Your home care nurse or __________ at (______) ______-__________ for any problems with the IV catheter.

• Your dietitian, ______________________ R.D., at (______) ______-__________ for concerns regarding formula and feedings.

• For after hours calls requiring the GI doctor on call, you may call (816) 234-3807, and the nurse will page the GI doctor for you.

Special Instructions:

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