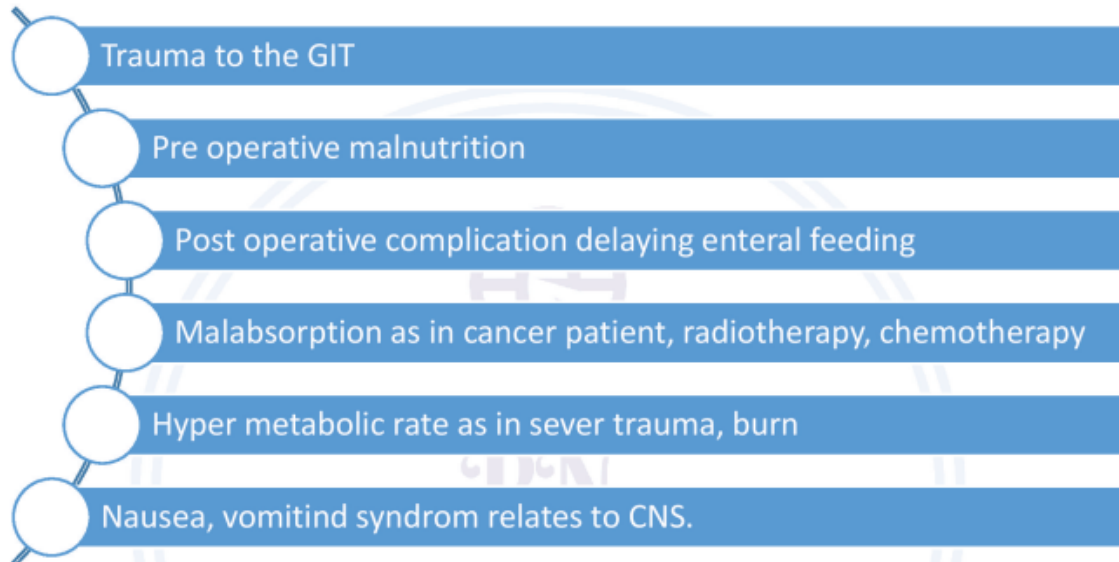


TOTAL PARENTRAL NUTRITION

Definition:

Total parenteral nutrition is a way of supplying all the nutritional needs of the body by bypassing the digestive system and dripping nutrient solutions directly into a vein.

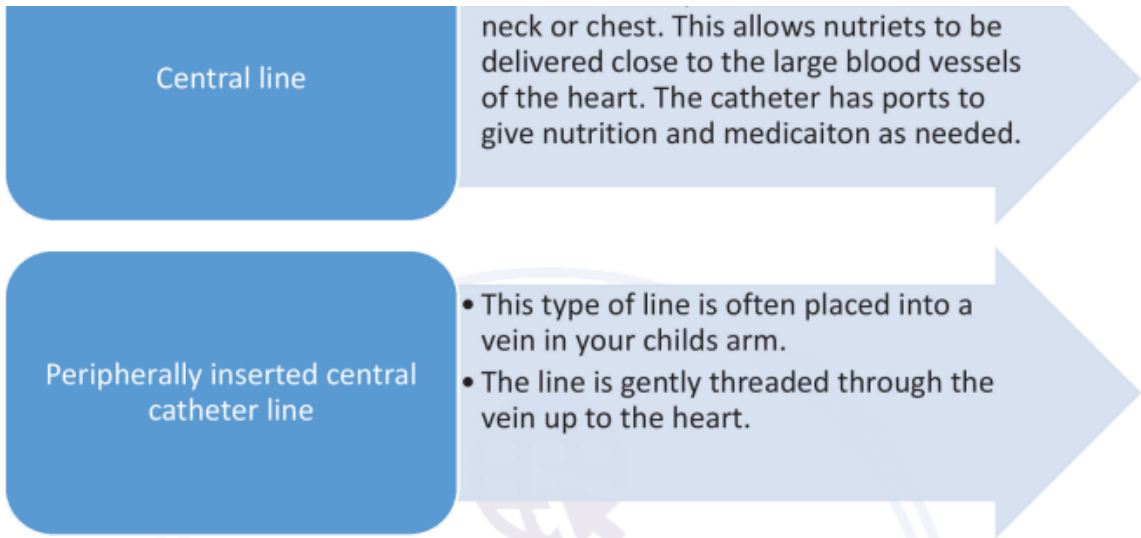
INDICATION:

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- Trauma to the GIT
 - Pre operative malnutrition
 - Post operative complication delaying enteral feeding
 - Malabsorption as in cancer patient, radiotherapy, chemotherapy
 - Hyper metabolic rate as in sever trauma, burn
 - Nausea, vomitind syndrom relates to CNS.

TYPES:

The Land of PharmD

• The catheter is placed into a vein in the



TPN CONTENT

They are determined based on the individual variables (age, weight, height and the medical conditions)

All solutions contain:

- Sugar (dextrose) for energy
- Proteins
- Fats
- Electrolytes (K+, Na+, Ca+, Mg+, Cl- and phosphate) these are essential for normal body functioning.
- Trace elements (Zn, Cu, Mn and Cr)
- Vitamins
- Insulin (helps the body use sugar), may need to be added.

Do's and Do not of TPN

DO	DO NOT
Refrigerate the TPN solution until 30 minutes before using it.	Don't store TPN solution at room temperature, which would promote bacterial growth
Avoid infusing it immediately after refrigeration	Don't allow a bag of TPN solution to hang longer than 24 hours
Check the bag against the order for the correct patient name, formula components and	Don't add medication to a TPN bag, piggyback anything into a TPN line or administer other

expiration date	medications through the same lumen as TPN solution
Explain the procedure to the patient	Don't administer TPN solution that has a brown layer, which indicates that the lipids have separated from the solution.
Use a filter to administer TPN solution. Initiate therapy at a rate of 40-50 ml per hour, then increase the rate by 25 ml per hour every six hours until reaching the desired infusion rate.	

Every 24 hours, change both the bag and the tubing	
Be sure to clamp the central line	
Check the venous access site for redness and drainage and monitor the patient for signs and symptoms of sepsis	

ADVANTAGES	DISADVANTAGES
Decreased nursing time	Diminished stability and compatibility
Decreased risk of touch contamination	IV fat emulsions limits the amount of nutrients that can be compounded
Decreased pharmacy preparation time	Limited visual inspection of TPN, reduced ability to detect precipitates
Cost saving	
Easier administration	
Better far utilization in slow, continuous infusion of fat	
Physiological balance of macronutrients.	