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When you need tube feeding through a vein - parenteral nutrition (PN)

Department of Nutrition & Dietetics

Information for Adult Patients

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Introduction

When you are too ill to eat normally, we may use a different way of giving your body some or all of the nutrition it needs. There are 2 main ways of giving nutrition:

- **Enteral nutrition (EN) or enteral feeding:** we give a feed through a tube going into your stomach or small bowel.
- **Parenteral nutrition (PN) or parenteral feeding:** we give nutritional fluid directly into your bloodstream through a tube into a vein (intravenously).

This leaflet is for patients having parenteral nutrition (PN). It can also be called 'total parenteral nutrition (TPN)' or 'intravenous nutrition'. For this leaflet we will use 'PN'.

Why do I need parenteral nutrition (PN)?

There are several reasons why you may need PN. For example you may need it if:

- you cannot eat normally and/ or absorb enough nutrients through your gut because of illness or disease. This called intestinal failure.
- you cannot have nutrition through your digestive system. For example, if you have had surgery to your small bowel, or your bowel is blocked.
- it is difficult to put in a tube used for enteral nutrition (EN). For example, after some types of surgery to the head, neck or stomach.

How and when is PN given?

We give PN directly into your bloodstream using a very fine tube called a line. You may hear people talk about this as a PN line, PICC, central venous catheter or Hickman line. We insert this line into 1 of your large veins. This may be in your arm, neck or chest.

We do this procedure in the Radiology Department. We will give you more information depending on the type of line you are having.

Your PN will come in a special bag. It is covered to protect it from light. We will attach this to your line and will be given to you using an electronic pump. We often do this for 24 hours (1 day) at first. We may reduce it over time to give you a break from being attached to the pump.

Will PN give me with all the nutrients I need?

We carefully calculate the PN for your needs. It also gives you fluid to keep you hydrated. It usually has:

- glucose for energy.
- protein for growth and repair.
- fat for energy and cell repair.
- vitamins and minerals needed for essential body functions and health.
- certain salts (called electrolytes) that your body needs to function well.

What are the risks of PN?

The specialist nutrition support team will take care of you. This includes specialist doctors, dietitians, nurses and pharmacists. Your medical team will look after you while you are having PN. They will monitor you closely for:

- **Infection:** An infection in your PN line is the most common complication. To prevent this they will monitor your temperature and the insertion site of the line. Only a nurse with special training will attach the PN to your line.
- **High blood sugar:** They will monitor your blood sugar levels whilst you are having PN. If you have diabetes, you may need to start or change your insulin treatment if your blood sugar levels become high.

How will I know that the PN is working?

Your medical team will monitor you closely whilst you are having PN. They will monitor your:

- temperature,
- pulse,
- blood pressure,
- blood sugar level and
- fluid input/ output monitored throughout the day.

You will also have regular blood tests. You will have a blood test daily when you start PN. This is because it is important for us to check that the salts (electrolytes) in your PN are at the right amount for you. It is not safe to give PN without regular blood tests. You may have blood tests less often as you become more stable.

Your weight will also be monitored, this is often 2 times a week.

Will I feel hungry or thirsty?

As PN goes straight into your bloodstream, you may still feel some hunger or thirst. Sometimes feelings of hunger may be because of the sight or smell of food. You may have a dry mouth so it is important to brush your teeth and use a mouthwash regularly.

You must tell the medical staff caring for you if you feel hungry and thirsty. This may mean that your PN needs to be adjusted.

Can I still eat or drink whilst on PN?

This will depend on the reason why you need PN. Sometimes you will need to have ‘gut rest’ and be nil-by-mouth. However, some patients may be able to take small amounts of food or fluids. It is important that you try to do so if you can. If you are unsure, please ask the medical staff caring for you.

How will PN affect my bowels?

Even if you are not eating, the cells and bacteria in your gut are still active and so you may still need to have a poo.

As PN is given directly into your bloodstream, it will not cause you to be sick (vomit), have diarrhoea or stomach ache. If you have any of these symptoms, it may be because of your illness or condition. Tell your ward doctor or nurse if you any of the above.

Will I be able to move around whilst on PN?

Yes. Your PN bag and electronic pump are usually attached to a mobile drip stand. You will be able to move around.

Will I be able to have a bath or shower whilst on PN?

Yes. But you will need to take care when washing to keep the line site dry. Do not get too much water on the dressing covering your line. If your dressing gets wet, you must ask for this to be changed as soon as you are out of the bathroom. This helps to prevent infection.

How long will I need to have PN?

This will depend on the reason why you need PN. If you are having PN after surgery, this may be for 7 to 14 days or until your gut starts working again. Some patients need it for longer periods. We will talk about this with you.

We will stop PN when you are able to start having enough food or fluid by mouth, or when a specially placed feeding tube can be inserted into your gut.

What if I do not want to have PN?

The decision to have PN can only be made by you. We will talk about this with you. It is important that you ask any questions that you may have to help you make the decision which is right for you.

Sometimes, the decision to start PN may need to be made for you in your best interest. For example if you are in Intensive Care and not awake. If this applies to you it is still important to ask any questions that you may have.

More information

More useful information can be found on these websites:

- PINNT (Patients on Intravenous or Nasogastric Nutrition Therapy): https://pinnt.com
- BAPEN (British Association of Parenteral and Enteral Nutrition): https://www.bapen.org.uk

Who can I ask for more information about my PN?

You can contact Leicester Intestinal Failure Team (LIFT) on **0116 258 6988**.

Your nutrition support team (LIFT), ward doctors or nurses will be able to answer questions.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
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