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

Department of Nutrition & Dietetics

Information for Adult Patients

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Introduction

When you are too ill to eat normally, there are different ways of giving your body some or all of the nutrition it needs. There are 2 main ways of giving artificial nutrition:

- Enteral nutrition (EN) or enteral feeding - feed is given through a tube going into the stomach or small bowel.
- Parenteral nutrition (PN) or parenteral feeding - nutritional fluid is given directly into the bloodstream through a tube into a vein (intravenously).

This leaflet is for patients having parenteral nutrition (PN). It can also sometimes be called ‘total parenteral nutrition (TPN)’ or ‘intravenous nutrition’. For the rest of this leaflet we will use the term ‘PN’.

Why do I need parenteral nutrition (PN)?

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

- you are unable to eat normally and/ or absorb enough nutrients through your gut because of illness or disease. This is known as 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?

PN is given directly into your bloodstream by a very fine tube, known as a line (you may hear people talk about this as a PN line, PICC, central venous catheter or Hickman line). The line is inserted into one of your large veins. This may be placed in your arm, neck or chest.

You will have this procedure done in the Radiology Department. Depending on the type of line you are having, a further leaflet will be given to explain the procedure.

Your PN will come in a special bag, which is covered to protect it from the light. It will be attached to your line and given by an electronic pump. This is usually for 24 hours at first but may be reduced over time to give you a break from being attached to the pump.

Will PN provide me with all the nutrients I need?

PN is carefully calculated for your own individual needs. It also provides fluid to keep you hydrated. It usually contains:

- 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?

Patients needing PN will be under the care of a specialist nutrition support team, which includes specialist doctors, dietitians, nurses and pharmacists. Your medical team will look after you while you are having PN and this will be monitored very closely by them.

An infection in your PN line is the most common complication. To look out for the signs of this your temperature and the insertion site of the line will be monitored closely. Only a nurse with special training will attach the PN to your line.

Your blood sugar levels need to be monitored closely 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.

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

How will I know that the PN is working?

Your medical team will monitor you closely whilst you are having PN. You will have your temperature, pulse, blood pressure, blood sugar level and fluid input/ output monitored throughout the day. You will also have regular blood tests and your weight will be monitored (usually twice 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 due to 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.

It is important to tell the medical staff caring for you if you feel hungry and thirsty, as it 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 and 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 a result of your illness or condition and it is important that you tell your ward doctor or nurse.

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, so this will not stop you from moving 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 becomes wet, you must ask for this to be changed as soon as you are out of the bathroom to prevent an 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 to14 days or until your gut starts working again. However, some patients need it for longer periods and this will be discussed with you.

PN will be stopped 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 don’t want to have PN?

The decision to have PN can only be made by you and this will be discussed 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.

Further information

Further 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?

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

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

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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