

## Percutaneous Endoscopic Gastrostomy (PEG)

### Other formats

If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language, please contact the PALS desk on 01271 314090 or at [ndht.pals@nhs.net](mailto:ndht.pals@nhs.net).

### What is Percutaneous Endoscopic Gastrostomy?

A Percutaneous Endoscopic Gastrostomy (PEG) is a procedure to allow the placement of a tube in to the stomach from outside your body; this can be used for feeding, hydration and medication.

Percutaneous means through the skin.

Endoscopic refers to the endoscope which is a thin, flexible tube with a bright light and a camera at the end. It is passed through your mouth, down your gullet/oesophagus and into your stomach.

Gastrostomy refers to the artificial external opening to the stomach.

### Why is it needed?

PEG tubes may be needed due to temporary or deteriorating problems with swallowing. If your swallow is unsafe or variable, then there is a risk that food, liquids or medication can travel into your lungs instead of your stomach. This is called aspiration.

If your swallow is unsafe, you may be nil by mouth to reduce the risk of aspiration. A PEG tube will not change your swallowing problem or disease progression, but, it can improve quality of life by providing the nutrition and hydration you need. However, it will not completely protect against pneumonia, as you will still have saliva which could be aspirated but the risks will be greatly reduced.

Sometimes PEG tubes can be indicated for cancers where there may be an obstruction between the mouth and stomach or to allow the stomach to vent air and gastric juices.

A PEG tube can stay in place for years if needed but can also be reviewed for removal. It may be needed for all nutrition, hydration and medication but may also only be needed for a part of these. It is still possible for you to eat and drink with a PEG tube, if you have been advised that it is safe.

PEG tubes can be deemed inadvisable if you have complex anatomy (such as scoliosis), ascites (excessive fluid around the stomach), infection or problems with clotting/ bleeding. This will all be assessed with consideration of your current health, procedure risk and intended benefits.

## What does it involve?

The endoscope is passed through your mouth and into the stomach. This allows viewing inside your stomach and shines a light from inside to find the best position for the PEG tube.

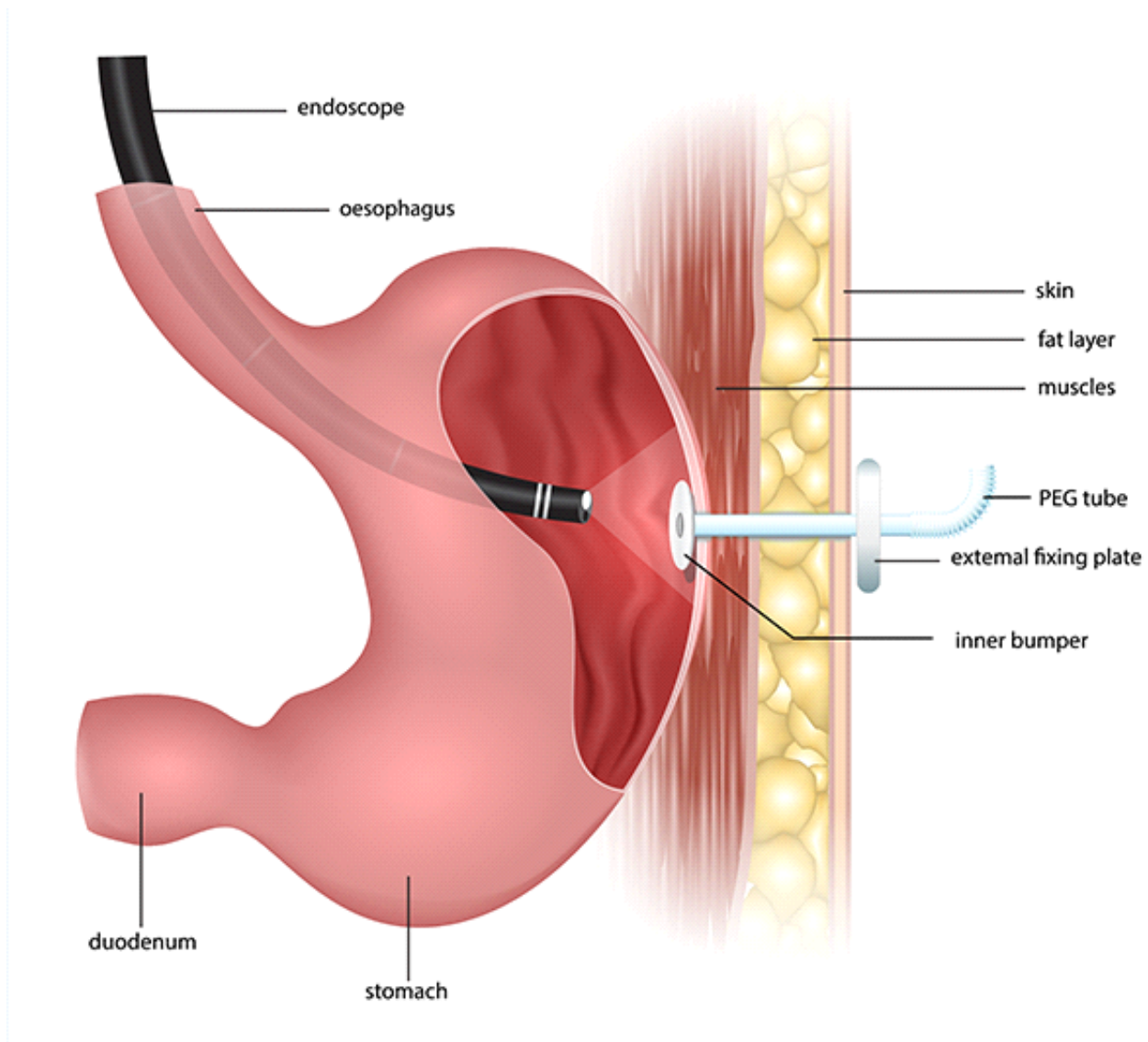
A small cut is made in the skin, and a wire is then passed from outside through the cut into the stomach which the endoscope connects with and withdraws out of the mouth. The diagram below should assist with understanding the procedure.

The PEG tube is then attached to the wire and passes back to the stomach, where a disc holds part of it inside you and the rest is held in place with a moveable disc on the outside.

This procedure is usually done with sedation, but can be done with throat spray (local anaesthetic) under special circumstances. Sedation is given to help you to relax during the procedure. You may be aware of what is happening but should feel comfortable. You may not remember having the procedure, as the sedation can affect your short term memory. It will not have a long term or permanent effect.

At North Devon District Hospital (NDDH), this procedure generally takes place in the Gemini suite (Endoscopy unit). Occasionally it may need to be performed in an operating theatre or in radiology.

The procedure does not take very long but if you have had sedation, you may need to wake up fully first in the recovery area on the Gemini suite. If you are not a hospital inpatient then it is generally anticipated that you would go home the same day.



## What are the alternatives?

For some patients the risks and indications can be less clear and they may decide to continue to be 'eating and/or drinking at risk'. There is always an option to decline the procedure as long as the risks and benefits are understood.

'Eating and drinking at risk' means that you accept that your swallow function is not working properly and there is a chance that you will aspirate which could manifest as pneumonia. This could become life threatening, so it is important to fully understand and discuss the options. However, you can choose to accept this risk and decide to continue with oral intake.

A nasogastric (NG) tube which passes from the nose to the stomach can also be used to bypass the lungs and provide nutrition, hydration and medication. This is usually a short term solution. It is visible on the face, and requires regular position checks to make sure it has not moved. Your doctor or healthcare professional will advise if this is the recommended tube for you.

A PEG tube is more comfortable and easier to manage at home long term. PEG tubes are also more discreet.

A Radiologically Inserted Gastrostomy (RIG) is a similar procedure but done under X-Ray guidance rather than using an endoscope. It may be more appropriate in some cases. The RIG procedures are currently done at the Royal Devon and Exeter Hospital. However, there are plans to introduce this service at NDDH in 2021, offering choices to our patients where they wish to have their procedure.

## Special preparations

In order to get good views of your stomach you must STOP EATING 6 hours before your appointment time.

Continue to drink clear fluids until two hours prior to your appointment time. For those two hours it is necessary to remain nil by mouth/tube until after your procedure

If you are taking any of the following medications, please contact the Gemini Endoscopy Suite as soon as possible, on 01271 349180 before you come into hospital.

- Warfarin
- Rivaroxaban
- Dabigatran
- Edoxaban
- Apixaban
- Clopidogrel
- Prasugrel
- Ticagrelor

If you have any concerns about medication, please contact your GP or speak to the medical team in hospital.

If you are taking medication for diabetes (insulin or tablets) and need advice, please contact the Diabetes Specialist Nurses on 01271 322726.

If you have any allergies or bad reactions to drugs or other tests, please tell the nurse on admission and/or doctor.

## How will I feel during the procedure?

If you have dentures, you will be asked to remove them when you go into the treatment room. If you have asked for local anaesthetic spray and it is safe to give it, it will be sprayed into the back of your mouth. This will numb your mouth and the first part of your gullet (oesophagus). The numb sensation will last for about 30 minutes.

To protect your teeth (and our endoscope), a small plastic mouth guard will be placed between your teeth. This will not interfere with your breathing. If you have chosen sedation, it will be given at this point. Your blood pressure and oxygen levels will be monitored. The nurse will gently hold the mouth guard and your head in the right position for the endoscope to be inserted. The nurse may also use a small suction catheter to keep your mouth clear of saliva.

You will be given some local anaesthetic before the small cut is made, which can feel like a nettle sting and the area may be sore afterwards.

## How will I feel afterwards?

If you have had sedation you will be transferred to the recovery room on the trolley to rest and recover, while the nurse monitors your blood pressure and pulse. When the tube is first placed, it can feel uncomfortable. Initially, this may be because of wind – it usually settles within a few hours. Some people do find that the discomfort can last for up to a week. Painkillers can be given during this period and should allow you to breath normally without discomfort. If you are unable to do this, please contact your GP.

## What happens after the procedure?

If you **have had sedation**, you will be able to go home within about two hours of your appointment. However, it is important that someone comes to pick you up from the Gemini Endoscopy Suite. Please **do not** use public transport. You also need to have someone to stay with you at home for at least 12 hours if you live alone. If this is not possible, please contact the Gemini Endoscopy Suite before your appointment. The telephone number is at the end of this leaflet.

It is important to rest and relax for the remainder of the day. You must not drive, sign legal documents, operate machinery or drink alcohol for 24 hours. It is also advisable to take the next day off work. You can have a shower 2 days after your procedure and a bath after 2 weeks of tube insertion.

If you are an inpatient you will be recovered to being awake in the Gemini Suite before being transferred back to the ward.

A single dose of antibiotics is given after the procedure to help prevent infection.

## What are the risks?

Minor complications are:

- Problems with gastric content leakage onto the outside skin which can cause irritation and soreness
- Infection at the entry site on the abdomen
- Over-granulation at the entry site, which is where the skin is trying to heal the hole by growing around it.

Major complications are rare and include:

- Problems with breathing during or after the procedure
- Bleeding
- Bowel perforation
- Infection

Other:

There is also an increased risk of damage to crowned/capped/loose teeth. Although a mouth guard is used, teeth or dental work such as crowns may be broken, chipped, loosened or completely removed by accident. Please inform the nurse on admission of any loose teeth or dental work they need to be aware of.

You will be closely monitored throughout and if there is any cause for concern, the procedure will be stopped immediately.

## Aftercare

For 4 hours after PEG insertion you would need to remain nil by mouth/PEG and then can start taking water via the tube or oral water (if permitted) gradually.

If water is well tolerated you could start having feed and medication down the tube 6-12 hours after the tube was inserted.

If you experience any of the following, STOP feed and medication delivery immediately and obtain medical advice urgently (GP, 111, attend A&E or 999)

- Pain on feeding
- Prolonged or severe pain post procedure
- Fresh bleeding
- External leakage of gastric contents

The dietitians will plan a regimen for feed and hydration and your pharmacists will plan when medication needs to be given. You may have been having these via a tube in your nose before the PEG insertion and be well established on a regimen beforehand.

It may have been possible to do some training with you, family and/or carers prior to the tube insertion around the feeding plan and equipment needed. There will also be opportunities to do training after the PEG insertion on the ward or in the community.

The PEG site will need to be cleaned daily. 10 days after the procedure it can be moved. You or your family/carers will be shown how to do this. This helps to stop the disc on the inside of your stomach getting stuck to the tissue and is called an Advance and Rotate.

## Follow up

You will be followed up by a selection of therapists depending on the reason for the PEG insertion.

In hospital there is a nutrition nurse who will try to coordinate all the healthcare professionals to manage your PEG tube.

The dietitians have hospital and community teams to help manage your feeding and fluid regime. There is also a Community Enteral Nursing team who will be available in the community to help with the care of your tube and training for you, family and carers.

## Further information

The Nutrition Nurse Bleep 329 is available 8-4 Monday to Friday (ring the main hospital reception 01271 322577 and they can bleep).

If you have any questions about this leaflet or the procedure, please contact the Nutrition Nurse, Gemini Endoscopy Suite 01271 349180 or the Dietetic Team 01271 322306 for advice.

It may be appropriate to include other members of the multidisciplinary team, for example the Learning Disability Nurse to assist during this process.

### **PALS**

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern, call 01271 314090 or email [ndht.pals@nhs.net](mailto:ndht.pals@nhs.net). You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.

## Have your say

Northern Devon Healthcare NHS Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of staff or the PALS team in the first instance.

'Care Opinion' comments forms are on all wards or online at [www.careopinion.org.uk](http://www.careopinion.org.uk).

Northern Devon Healthcare NHS Trust  
Raleigh Park, Barnstaple  
Devon EX31 4JB  
Tel. 01271 322577  
[www.northdevonhealth.nhs.uk](http://www.northdevonhealth.nhs.uk)

© Northern Devon Healthcare NHS Trust  
This leaflet was designed by the Communications Department.  
Tel: 01271 313970 / email: [ndht.contactus@nhs.net](mailto:ndht.contactus@nhs.net)