

Gastroscopy – Oesophago-gastro duodenoscopy (OGD) with PEG insertion



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If you are unable to keep your appointment, please notify the Endoscopy Unit booking office as soon as possible.

Contact telephone numbers: Monday to Friday 08.00-18.00 hours

For appointments: please contact the Endoscopy Unit booking office on 01493 452690

For advice: please contact the Endoscopy Unit on 01493 452370

Introduction

Following your recent clinic appointment, visit to the doctor or inpatient assessment it has been recommended that you have a feeding tube placed, called a Percutaneous Endoscopic Gastrostomy (PEG).

This booklet will give you information about the investigation and its risks and benefits to help you make an informed decision about having the procedure.

If you are unable to keep your appointment, please notify the department as soon as possible. This will enable the staff to give your appointment to someone else and they will be able to arrange another date and time for you.

This procedure requires your formal consent.

The consent form is a legal document. Once you have read and understood all the information, including the possibility of complications, and you agree to undergo the investigation, you will be asked to sign and date a consent form.

If however there is anything you do not understand or wish to discuss further do not sign the form, until you have spoken to a healthcare professional.

What is a PEG insertion?

The examination you will be having is called an oesophago-gastro-duodenoscopy (OGD), sometimes more simply known as a gastroscopy or endoscopy. We need to perform a gastroscopy in order to insert your PEG feeding tube.

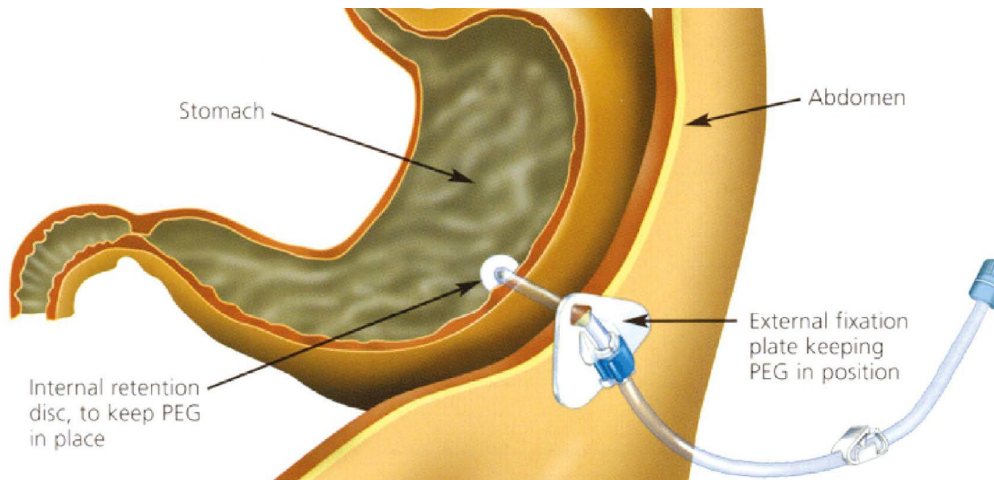
A gastroscopy is an examination of your oesophagus (gullet), stomach and the first part of your small bowel called the duodenum. The instrument used in this investigation is called a gastroscope. It is flexible and has a diameter less than that of a little finger. Each gastroscope has an illumination channel which enables light to be directed onto the lining of your upper digestive tract and another which relays pictures back to the endoscopist onto a television screen.

During the investigation, the doctor may need to take some tissue samples (biopsies) from the lining of your upper digestive tract for analysis; this is painless. The samples will be retained. Photographs may be taken for your records.

What does PEG stand for?

PEG stands for Percutaneous Endoscopic Gastrostomy.

- **Percutaneous** is the term for something that is inserted through the skin.
- **Endoscopic** refers to the endoscope or gastroscope used to carry out the procedure.
- **Gastrostomy** refers to an opening into the stomach.



What is a PEG tube and why do I need one?

A Percutaneous Endoscopic Gastrostomy (PEG) is a procedure to place a feeding tube through your skin and into your stomach. Your doctor has recommended a PEG, however it is your decision whether to go ahead with the procedure or not.

Your healthcare team is concerned that you are not able to eat or drink enough in the normal way. This is usually caused by a problem that makes it difficult for you to swallow, such as a stroke or growth in the wall of the pharynx (throat). A PEG should allow the healthcare team to give you the nutrients and fluids you need to stay alive. They can also give you medication through the tube.

A PEG tube is a small plastic tube which is inserted into your stomach. Your PEG tube allows you to be fed directly into your stomach and to receive the food and fluid that you need.

A PEG will help if you have a condition that increases the amount of nutrients you need to maintain your energy levels, such as Cystic Fibrosis.

A PEG tube may be useful if you:

- Have difficulty swallowing
- Have a risk of aspiration ('food going down the wrong way')
- Are unable to get enough nourishment from the food you eat

It is important to be aware that if you suffer from reflux or regurgitation, this problem will not improve by having a PEG.

Your PEG feeding tube can be removed in the future if you no longer need it for nourishment.

What are the risks?

A. The endoscopic examination:

The healthcare team will make your procedure as safe as possible. However, complications can occur. Some of these can be serious.

The possible complications of a PEG are listed below. Any numbers which relate to risk are from studies of people who have had this procedure. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

- Infection: usually any infection is mild and affects only the area around the exit site (risk 1 in 10). However, sometimes the tissues of your abdomen can get infected (risk 1 in 1000). It is possible to get an infection from the equipment used, or if bacteria enters your blood. The equipment is sterile so the risk is low, but you should let the endoscopists know if you have a heart abnormality or a weak immune system. You may need treatment with antibiotics. You should let your GP know if you get a temperature or feel unwell.
- Chest infection: The risk is higher if you already have problems swallowing and you need sedation or the local anaesthetic spray. A chest infection can also be caused by reflux, where some of the food from the tube travels up into the oesophagus.
- Bleeding during or after the procedure. This can usually be stopped by using the tube to put pressure on the wound.
- Blocked tube. This can happen after a number of months as the tube deteriorates. You may need another PEG to replace the tube.
- Peritonitis (infection in the peritoneum). This can happen if some air or bowel contents leak into your abdominal cavity. Peritonitis can usually be treated with antibiotics and normally settles in two to three days. However, it may delay the time until the healthcare team can feed you using the tube.
- PEG tube falling out within the first 12 weeks, before the stomach properly joins to the abdominal wall. This is a serious problem. Do not try to put the tube back. Go to the nearest Accident and Emergency department or call an ambulance.
- Damage to the liver or intestine by the needle (risk: less than 1 in 500). This can be life-threatening, and can happen if the liver or intestine is stuck close to the stomach as a result of previous surgery.
- Buried internal bolster. The bolster can sometimes get attached to the lining of your stomach. It is important to follow the advice from your healthcare team to help prevent this from happening.
- Leaking from the exit site, if over time the hole in your stomach gets bigger than the tube. The healthcare team may need to remove the tube for a few days while the hole gets smaller.
- Tissue overgrowth (granulation) around the exit site. This is where moist tissue, dark pink or red in colour, develops around the tube as the body tries to heal the wound. A small amount is normal. However, a lot of granulation tissue can cause pain and make it difficult to care for the PEG tube. Follow your doctor's advice about using silver nitrate to treat the tissue.
- Allergic reaction to the equipment, materials or drugs. The endoscopy team can detect and treat any reactions that might happen. Let the endoscopists know if you have any allergies or if you have reacted to any drugs or tests in the past.
- Perforation or tear of the lining of the stomach or oesophagus and bleeding which could entail you being admitted to hospital. Certain cases may be treated with antibiotics and intravenous fluids. Perforation may require surgery to repair the hole.

- Damage to teeth or bridgework. The endoscopists will place a plastic mouthpiece in your mouth to help protect your teeth. Let the endoscopists know if you have any loose teeth.
- Death which does sometimes happen with a PEG (risk: less than 2 in 100). The risk is less the fitter you are. The risk will increase if any other complications happen following the operation, such as a chest infection.

You should discuss these possible complications with your doctor if there is anything you do not understand.

B. Sedation:

This can occasionally cause problems with breathing, heart rate and blood pressure. If any of these problems do occur, they are normally short lived. Careful monitoring by an endoscopy nurse ensures that any potential problems can be identified and treated rapidly.

Older patients and those who have significant health problems, for example, people with significant breathing difficulties due to a bad chest may be assessed by a doctor before being treated.

Please note that occasionally the test may need to be abandoned or may be incomplete. In this case, the test may need to be repeated or we may suggest an alternative procedure.

What are the alternatives?

It is possible to be given nutrients and fluids through a tube that is placed into your nostrils and down into your stomach (naso-gastric or NG tube). However, an NG tube is only recommended if you need help for a short period of time and it's suitable for you. If you need help for a longer time or it's not suitable for you your doctor will normally recommend a PEG.

Other alternatives are-

- Surgical Gastrostomy - The feeding tube is placed directly into your stomach by an operation. However, this involves an anaesthetic and has a higher risk of complications.
- Radiologically placed Gastrostomy (RIG) - The tube may be guided into your stomach using x-rays. This procedure has similar risks and benefits to a PEG.
- Parenteral nutrition (PN) - It is also possible to be given nutrients and fluids directly into your bloodstream. However, PN has more possible complications and is usually recommended if you cannot take food through your digestive system.

Your doctor will tell you why a PEG has been recommended for you.

Preparation for the test

If you are having the procedure during a hospital admission, then you will be prescribed daily Octenisan® body wash by the ward team.

Octenisan® is a body wash used to reduce the risk of infection.

If you are being admitted from home, you will be prescribed Octenisan® body wash for daily use for three days before the procedure.

If you are being admitted from a care home, the staff will take swabs to check whether or not you are a carrier of bacteria called MRSA. If you are MRSA positive your GP will prescribe Octenisan® body wash daily and Mupirocin (Bactroban) nasal ointment three times a day for five days and then further swabs will be taken. If you still test positive for MRSA, advice will be sought from the infection control team.

Eating and drinking

The procedure must be performed on an empty stomach to reduce risk of vomiting so you must not eat or drink for six hours before the test even if you are already being fed using a tube (only sips of water are safe up to two hours before the test).

Blood Tests

You will need to have some blood tests one to two days before the procedure to ensure the procedure can go ahead as planned.

Diabetics

As a person with diabetes, you will need to adjust your treatment according to the timing of the appointment. As a result your blood sugar may be a little higher than usual. This is only temporary in order to maintain your blood sugars through the procedure and you will be back to your usual level of control within 24-48 hours. Please see guidance provided separately or refer to JPUH patient information on the website.

Anticoagulants

If you are taking anticoagulants e.g. warfarin or acenocoumarol, the anticoagulation nurse will contact you at least seven days prior to your appointment about stopping, or dosing, and arranging a blood test. On arrival to the endoscopy unit the nurse will test your blood to check your INR and advise on dosing after the procedure.

If you are taking direct oral anticoagulants e.g. dabigatran, rivaroxaban, apixaban and edoxaban stop these three days (at least 72 hours) prior to your appointment.

If you have any concerns please contact the Endoscopy Unit for advice.

Anti-platelet agents

There is no restriction in taking aspirin or dipyridamole which can be taken as usual. If you are taking clopidogrel, ticagrelor or prasugrel **please stop these seven days prior to your appointment**. The referring doctor will tell you if you are required to take aspirin for that time period. However, if you have had a cardiac stent inserted in the last 12 months your consultant will need to discuss any changes to your medication with a cardiologist. If your consultant has not discussed this with you please ring the relevant secretary.

Other medication

You should continue to take all of your other medications as normal, unless you have been told otherwise by your referring doctor.

How long will I be in the endoscopy department?

This largely depends upon whether you are a patient in the hospital or whether you are an outpatient. It also depends how busy the department is. If you are a patient on a ward, you will be taken back to the ward as soon as possible after the procedure.

Otherwise you should expect to be in the department for approximately one to three hours. Please note that emergencies can take priority over outpatient lists.

What happens when I arrive?

You will be met by an endoscopy nurse who will ask you a few questions, one of which concerns your arrangements for getting home.

They will ensure you understand the procedure and discuss any outstanding concerns or questions you may have.

You will have a brief medical assessment regarding your medical condition and any past surgery or illness you have had to confirm that you are sufficiently fit to undergo the investigation.

Your blood pressure, heart rate and oxygen levels will be recorded. If you are diabetic your blood glucose level may be checked.

You will then be asked to change into an examination gown and a nurse will insert a cannula into a vein, usually on the back of your hand, through which medication can be administered during the procedure.

The consultant will take consent for the procedure and enable you to ask any further questions.

What happens during the procedure?

You will be introduced to the team looking after you and they will attach you to monitoring equipment for blood pressure and a finger probe to monitor your breathing.

Once you have removed any false teeth, your throat may be sprayed with local anaesthetic and you will be asked to swallow. This may taste unpleasant.

You will then be laid flat and a plastic mouth guard placed between your teeth. You may be given oxygen through a small tube in your nose.

Intravenous sedation

The sedation will be administered into a vein in your hand or arm which will make you lightly drowsy and relaxed but not unconscious. You will be in a state called conscious sedation: this means that, although drowsy, you will be able to hear what is said to you and therefore will be able to follow simple instructions during the investigation. You will be able to breathe quite normally throughout. It is possible that the sedation may result in you being unable to remember anything about the investigation.

Whilst sedated we will check your breathing and heart rate so changes will be noted and dealt with accordingly. For this reason you will be connected by a finger probe to a pulse oximeter which measures your oxygen levels and heart rate during the procedure. Your blood pressure may also be recorded.

Please note that if you decide to have sedation you are not permitted to drive, take alcohol, operate heavy machinery or sign any legally binding documents for 24 hours following the procedure and you must have a responsible adult to accompany you home and stay with you over night.

A PEG usually takes between fifteen and twenty minutes. It involves placing a flexible telescope (endoscope) into the back of your throat and down into your stomach. The endoscopists will use the endoscope to guide them while they insert the feeding tube.

You may be asked to swallow when the endoscope is in your throat. This will help the endoscope to pass easily into your stomach. The endoscope will be used to blow air into your stomach to improve the view and to expand your stomach so that it presses against your abdominal wall.

Local anaesthetic will be injected into the area on your abdomen where the tube will be inserted. This stings for a moment but will make the area numb, allowing the tube to be placed into your stomach with much less discomfort for you. They will press on your stomach to help make sure the tube is placed in the correct position. A needle will be passed through the abdomen and into the stomach

and a fine thread is passed through the needle and into your stomach. The endoscope will be used to get hold of the end of the wire and the endoscope is removed bringing the wire out of your mouth. The feeding tube is attached to the wire and used to pull the tube down into your stomach and through the hole in your abdominal wall (exit site). The endoscopists will remove the needle to leave one end of the feeding tube in your stomach with about 8 to 10 centimetres (about 3 to 4 inches) of tube outside of your abdomen.

The tube has a bumper (internal flange) that sits inside your stomach and helps to prevent the tube from coming out.

Over the next few months, the stomach and abdominal wall will join together.

The procedure is usually not painful. However, you may feel bloated because of the air blown into your stomach.

What happens after the procedure?

After the procedure you will be transferred to the recovery area and then to the ward. If you were given a sedative, you will normally recover in about an hour. However, this depends on how much sedation you were given.

You may feel a bit bloated for a few hours but this will pass. You will usually have a tight feeling in the area where the feeding tube is, but this will settle over the next couple of days.

You (or your carer) will usually be trained by a specialist nurse or dietician who will show you how to feed yourself using the tube. It is important to follow the advice you are given to prevent infection and the tube becoming blocked.

Your healthcare team will ensure you have the appropriate support to look after your feeding tube on discharge from hospital.

If you are worried about anything, in hospital or at home, contact a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

Returning to normal activities

If you have pain when feeding, or if you have bleeding or leaking from the exit site within 72 hours of having the feeding tube, it is important that you stop feeding and contact the healthcare team.

Depending on the problem that made it difficult for you to swallow, you should be able to return to your normal activities after one to two weeks. If you go swimming, you should wear a waterproof dressing.

If you have any problems with the feeding tube or exit site, contact a member of the healthcare team. In an emergency, go to your nearest Accident and Emergency department.

Do not drive until you are confident about controlling your vehicle and always check your insurance policy and with your doctor.

Lifestyle changes

If you smoke, you should stop smoking now as this will improve your long term health. Regular exercise should also improve your health and wellbeing. Before you start exercising, ask a member of the healthcare team or your GP for advice.

The future

The healthcare team will monitor you closely. Your doctor will advise you on how long you need to have the tube. This will depend on the problem that made it difficult for you to swallow. If you no longer need the tube, your doctor will discuss this with you. Once the PEG tube is removed, the hole in the stomach may leak for a few days but then usually heals by itself. If it does not heal properly, contents of the stomach can leak onto the skin (gastrocutaneous fistula). This is more likely if the

PEG tube has been in place for longer than eight months. If this happens, you may need an operation.

Summary

A PEG is usually a safe and effective way of allowing you to get the nutrients and fluids you need to stay alive. However, complications can happen. You need to know about them to help you make an informed decision about the procedure. Knowing about them will help the early detection and treatment of any problems.

Keep this information leaflet. Use it to help you if you need to talk to a healthcare professional.

Contacts

For appointments: please contact the Endoscopy Unit booking office on **01493 452690**

For advice: please contact the Endoscopy Unit on **01493 452370**

Monday to Friday 08.00 – 18.00

General points to remember

It is our aim for you to be seen and investigated as soon as possible after your arrival. However, the department is very busy and your investigation may be delayed. If emergencies occur, these patients will obviously be given priority over less urgent cases.

If you have any problems with persistent or worsening abdominal pain after your procedure, please contact your GP immediately informing them that you have had an Endoscopy.

If you are unable to contact or speak to your doctor, you can phone or attend the hospitals A&E department. You can contact them on **01493 452559**.

Privacy and dignity

Please note we have single sex changing, recovery and toilet facilities available in the unit.

Please be advised that relatives are not permitted into the procedure room with the patient or into the recovery areas. This is to protect other patients' privacy, dignity and enable staff to concentrate on looking after the patients.

Visit our website:

<http://www.jpaget.nhs.uk/departments-services/departments-services-a-z/endoscopy-unit/>

Guidelines for people with diabetes undergoing endoscopic procedures

Every effort will be made to offer you a morning appointment if you are on insulin and require an endoscopic procedure. If you have been given an afternoon appointment please be sure to tell the department that you are a diabetic on insulin.

Insulin

If you are on insulin four times daily or more and require insulin adjustment advice, contact the Diabetes Nursing Team on 01493 453373 (answer phone).

If you are on an insulin infusion pump there is no need to make any adjustment to your bolus insulin doses. Your basal insulin should be reduced by 30% for two hours before and two hours after any booked procedure time. This can be extended, if necessary, according to recovery and diet.

If you are on pre-mixed insulin (e.g. Humulin M3, Insuman Comb 25 or NovoMix 30) up to three times daily please contact Diabetic Nursing Team for advice and refer to guidance provided separately to this leaflet.

This booklet was produced by:

The Endoscopy Team and the Endoscopy Patient Participation Group at the James Paget University Hospitals NHS Foundation Trust.

Diabetic patient information ratified by Dr Joanne Randall, Consultant Endocrinologist.

Your Feedback

We want your visit to be as comfortable as possible - talk to the person in charge if you have any concerns. If the ward/department staff are unable to resolve it, then ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care.

Before leaving please complete a Friends and Family Test feedback card.

Help us transform NHS services and to support patient choice.

OUR VALUES

Collaboration

We work positively with others to achieve shared aims

Accountability

We act with professionalism and integrity, delivering what we commit to, embedding learning when things do not go to plan

Respect

We are anti-discriminatory, treating people fairly and creating a sense of belonging and pride

Empowerment

We speak out when things don't feel right, we are innovative and make changes to support continuous improvement

Support

We are compassionate, listen attentively and are kind to ourselves and each other



The hospital can arrange for an interpreter or person to sign to assist you in communicating effectively with staff during your stay. Please let us know.

For a large print version of this leaflet, contact PALS 01493 453240