

Transnasal Endoscopy (TNE)



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Introduction

You have been advised by your GP or hospital doctor to have an investigation known as a transnasal endoscopy (TNE).

This booklet has been written to enable you to make an informed decision about having the investigation. It explains the risks, benefits and alternatives.

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** and, with this leaflet, we have included a consent form; this is a legal document, therefore, please read it carefully. Once you have read and understood all the information, including the potential complications, and you agree to undergo the investigation, **please sign and date the consent form.**

You will notice that the form is in duplicate, allowing you to keep a copy for your records. If, however, there is anything you do not understand, or wish to discuss further, do not sign the form, but bring it with you to the appointment. You can sign it when you have spoken with a healthcare professional.

What is a Transnasal Endoscopy (TNE)?

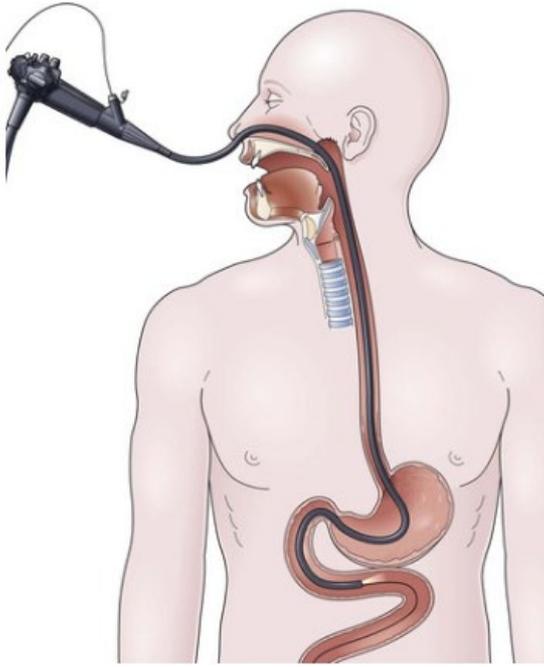
TNE is a camera examination of the upper digestive tract performed by an endoscopist. The camera is inside a long flexible tube called a **gastroscope** which has a diameter less than that of your little finger. The gastroscope is passed through your nose and down your throat. This allows us to directly examine your oesophagus (gullet), stomach and the first part of your small bowel called the duodenum. The gastroscope does not interfere with your breathing and you will be able to speak during the procedure.

The gastroscope has an illumination channel which enables light to be directed onto the lining of your upper digestive tract and relay pictures back to a television screen.

During the procedure, the endoscopist may need to take some tissue samples (biopsies) from the lining of your upper digestive tract; this is painless. The samples will be retained and sent to the laboratory for analysis. Photographs of the upper digestive tract may also be taken during the procedure and will be stored on your medical record.

The procedure itself takes approximately 10-15 minutes, however, please allow two to three hours in the hospital for the whole process to be completed.

The procedure will be performed by, or under the close supervision of, an experienced doctor or nurse endoscopist.



Why do I need to have a Transnasal Endoscopy?

This investigation has been recommended by your doctor to try and find the cause for your symptoms, to help decide on treatment and, if necessary, any further investigations.

There are many symptoms for which this investigation might be useful, e.g. indigestion, anaemia, weight loss, vomiting, passing black motions, vomiting blood or swallowing difficulties.

Will I have an anaesthetic?

One of the advantages of TNE is that it is more comfortable and more easily tolerated than a regular gastroscopy (where the camera is passed through the mouth). This means the gag reflex is not usually triggered and, as such we do not use sedation or a general anaesthetic for this procedure.

Local anaesthetic sprays are used to numb the nasal passages and the back of the throat. This allows for an easier passage of the gastroscope through the nose, down the throat and into the oesophagus.

The benefit of local anaesthetic is that you are fully conscious and aware of your surroundings. You will be able to go home unaccompanied almost immediately after the procedure and you are able to drive and carry on life as normal. The only constraint is that you must not have anything to eat or drink for 60 minutes after the procedure, until the sensation in your mouth and throat has returned to normal. We strongly advise that, when having your first drink after the procedure, it should be a cold drink and should be sipped slowly to ensure the sensation has returned and to prevent choking.

What are the risks?

TNE is a safe procedure. The most common side effects are soreness in the nose or a nosebleed. In most cases these will settle spontaneously. Rarely, the nosebleed will be heavy and you may need further treatment to stop the bleeding.

- You may be allergic to the anaesthetic spray. Please contact the nursing team before your procedure if you know you are allergic to lignocaine/phenylephrine.

- There is a small risk of missing some abnormalities. It is rare to miss cancer.
- Bleeding may occur at the site of the biopsy. This almost always stops on its own.
- Perforation or tear of the lining of the stomach or oesophagus, and bleeding which could entail you being admitted to hospital. This risk is approximately less than 1 in 10000 cases. Certain cases may be treated with antibiotics and intravenous fluids. Perforation may require surgery to repair the hole.

Are there any alternatives?

The transnasal route may not be suitable for patients who suffer from nose bleeds, have a deviated nasal septum, nasal polyps or liver disease, or are taking anti-coagulants (blood thinners). If we identify any such concerns, you may need to have a regular gastroscopy instead. We will inform you if we need to do this.

Alternatives to a transnasal endoscopy would be an x-ray examination, known as a barium meal, or a CT scan. These do not give us as much information as the endoscopy and have the added disadvantage that tissue samples cannot be taken. In addition, the exposure to radiation involved in x-rays and CT scans is unsuitable for some patients.

If my symptoms have stopped should I still come for the test?

Yes, it is important that you still come for the transnasal endoscopy. Your doctor has organised this test to ensure you have no problems in your stomach. Although the symptoms may have gone, it is still important that you attend for the procedure.

How can I prepare for TNE?

A clear view of the stomach is required for this examination to be successful so it must be as empty as possible. It is vitally important to follow the preparation advice you have been given. If you do not follow these instructions, your procedure may be cancelled.

PLEASE DO NOT EAT FOR SIX HOURS BEFORE THE TEST. You may drink clear fluids e.g. water, fizzy drinks, tea and coffee **without milk**, up until two hours before the procedure.

What about my medication?

Digestive Medication

If you are taking tablets to reduce the acid in your stomach please discontinue these tablets two weeks before your investigation **unless** you are having:

- a follow-up procedure to check for healing of an ulcer found during the last two to three months, or
- a surveillance gastroscopy for Barrett's oesophagus.

For these procedures please continue to take your acid-reducing medications. If you are unsure, please telephone the unit.

Diabetes

If you have diabetes controlled on medication and/or insulin please ensure you notify the Endoscopy Unit so that we can ensure your appointment is at the beginning of the list. Please see guidelines printed in the back of this leaflet.

Anticoagulants and anti-platelet agents

If you are taking anticoagulants (blood thinners) e.g. warfarin or acenocoumarol, the anticoagulation nurse will contact you at least **seven days prior** to your appointment to explain about stopping, or changing the dose, and arranging a blood test.

When you arrive at the Endoscopy Unit for your TNE appointment, the nurse will test your blood and advise you on taking your medication after the procedure.

There is no restriction on taking aspirin or dipyridamole; these can be taken as usual.

You may only need to stop antiplatelet or anticoagulant medication if you are having a therapeutic procedure such as removal of a polyp. Your consultant will advise you.

Medical devices

If you have a pacemaker or implantable cardioverter defibrillator (ICD) that has not been checked within the last six months, please notify the Endoscopy Unit as soon as possible. If the device has been checked within six months then, when you attend your appointment for TNE, you should inform the nurse of the device and the date it was last checked.

Other medication

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

Please bring a list of your regular medication and any inhalers or sprays with you.

How long will I be in the endoscopy department?

This largely depends upon whether you have sedation and also how busy the department is. You should expect to be in the department for approximately one to three hours. Emergencies will take priority over outpatient lists.

What happens when I arrive?

A nurse will check your details, including medication and allergies.

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

You will have a brief assessment regarding any medical conditions, past surgery or illnesses to confirm that you are fit enough to undergo the procedure.

Your blood pressure and heart rate will be recorded and, if you have diabetes, your blood glucose level will also be checked. If you suffer from breathing problems your oxygen level will be measured. The James Paget University Hospital NHS Trust is a national training centre for endoscopy. Medical and nursing students and junior doctors and nurses may be involved in your care. If you do not want students to be present, please inform the doctor or nurse in charge.

If you have not already done so, and you are happy to proceed, you will be asked to sign your consent form confirming that you agree to have the procedure and that you understand what it involves. Even if you have previously given your consent, please be assured that you can withdraw it at any time

The procedure

You will be escorted into the procedure room where the endoscopist and the nurses will introduce themselves. You will have the opportunity to ask any further questions.

Prior to the procedure, two local anaesthetic sprays will be used to prepare you for the procedure. The first spray is used to numb the upper airway and expands the nostrils to help the endoscope pass through the nasal passage. The second spray is used to numb the back of your throat and has a slightly bitter taste. The effect lasts approximately 30 minutes.

The transnasal endoscope is gently inserted via your nose into your oesophagus and into the stomach. This is not painful and will not make breathing or swallowing difficult, however, you may feel some discomfort during the procedure. Careful continued slow breathing through your mouth or nose may alleviate any discomfort. The nurse may need to clear saliva from your mouth using a small suction tube. If you gag, you won't vomit because your stomach will be empty. The test takes approximately 10-15 minutes.

During the procedure, samples may be taken from the lining of your digestive tract. These will be retained and sent to the laboratory for analysis. Any photographs that are taken of the digestive tract will be recorded in your medical notes.

After the procedure

Following the procedure you may be discharged home immediately. However, if you are feeling unwell or uncomfortable, you will be taken to the recovery area for a short time. Before you leave the department, the nurse or doctor will explain the findings and any medication or further investigations that may be required. They will also notify you of any further appointments that are necessary.

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 hospital's A&E department. You can contact them on **01493 452559**.

General points to remember

We aim for you to be seen and have the procedure as soon as possible after you arrive, however, the department is very busy and your procedure may be delayed. Please be advised that emergency procedures will be given priority over less urgent cases.

Privacy and dignity

Please note we have single sex changing areas, recovery areas and toilet facilities on the unit.

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

Contacts

If you need further advice please contact endoscopy on 01493 452370 Monday to Friday 08.00 – 18.00

Visit our website:

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

Guidelines for people with diabetes undergoing endoscopic procedures

If you have diabetes and are taking insulin and require an endoscopic procedure, every effort will be made to offer you a morning appointment. If you have been given an afternoon appointment please ensure you inform the department that you have diabetes and take insulin.

Insulin

If you are having insulin four or more times daily 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 then, on the **evening before** your procedure, reduce your insulin dose by a third at your evening meal.

On the **morning of the procedure**, you should have nothing to eat after midnight but may have water up to 06.00am. If you feel hypoglycaemic, take glucose tablets, or drink clear sugary fluids as advised on the list at the end of this information.

Do not take your morning dose of insulin but bring your insulin with you to take after the procedure and once the nursing staff have informed you that you are able to eat and drink safely. You should only take your insulin with food.

If you normally take insulin at breakfast and evening meal, reduce the first dose after your procedure by half if taken after 11.00am. This is to give you sufficient time lapse between the two injections to reduce the risk of hypoglycaemia in the evening.

If you take insulin at breakfast, lunch and evening meal omit the morning dose and take your normal dose at lunchtime.

If you are on **short acting and medium/long acting insulin** which are not pre-mixed eg Actrapid and Insulatard or Hypurin Porcine/Beef Neutral and Hypurin Porcine/Beef Isophane and have a morning appointment then, on the **evening before** your procedure, reduce medium/long acting insulin by one third.

Take normal short acting insulin.

On the **morning of the procedure**, do not take your morning dose of short acting insulin but bring it with you to take after the procedure and with food.

You should take half your normal dose of medium/long-acting insulin at your normal time even though you are not eating.

If you are on once daily insulin and have a morning or afternoon appointment, you should reduce any morning dose by one third even though you are not eating.

You should not need to make any adjustment to your evening dose.

If you have tablet-controlled diabetes and require an endoscopic procedure, every effort will be made to offer you a morning appointment. If you have been given an afternoon appointment please ensure you inform the department that you have tablet-controlled diabetes.

You should have nothing to eat after midnight but may have water up to 06.00am. If you feel hypoglycaemic, take glucose tablets or drink clear sugary fluids as advised on the list at the end of this information.

Diabetes Tablets

If you have tablet-controlled diabetes and have a morning appointment then, on the **evening before** your procedure, if you are taking any of the following:

metformin, nateglinide, repaglinide, gliclazide, glimepiride, glipizide or tolbutamide, it is not necessary to make any dose reduction.

If you are taking *glibenclamide*, reduce any evening dose by half.

Pioglitazone, sitagliptin, saxagliptin, linagliptin and dapaglifloxin are all diabetic tablets normally taken in the morning. If you are taking any of these you do not need to make any dose changes.

Vildagliptin is normally taken twice daily but it is not necessary to reduce the evening dose.

Acarbose may be taken up to three times daily. If you are taking acarbose it is not necessary to make any dose changes on the day before the procedure.

Liraglutide and lixisenatide (injections) are normally taken once daily in the morning. You do not need to make any changes on the day before the procedure. If you normally inject either of these before your evening meal, do not take the evening dose but restart your normal dose on the following evening (the day of the procedure).

Exenatide (injection) is normally taken twice daily. Take your morning injection as normal but do not take the evening injection.

Morning of the appointment:

Do not take your morning dose of tablets, but bring them with you to take after the procedure.

Report to nursing staff if you have needed glucose before arriving, and inform them immediately if you feel hypoglycaemic at any time during your visit.

You can take the following diabetic medications, with food, as soon as the nursing staff inform you that you can eat and drink safely: *metformin, pioglitazone, sitagliptin, saxagliptin, linagliptin, vildagliptin, liraglutide, lixisenatide, exenatide, dapaglifloxin, acarbose*.

You should **not** take your morning dose of any of the following: *nateglinide, repaglinide, gliclazide, glimepiride, glipizide or tolbutamide* but resume your normal dose at the evening meal.

Bydureon (slow release exenatide) is taken once weekly by injection. If this coincides with the morning of your procedure, do not take in the morning but take with the evening meal.

If you are on diabetes tablets and have an afternoon appointment:

Take any medication, as normal on the day before the procedure. If you feel hypoglycaemic, take glucose tablets, or drink clear sugary fluids as advised on the list at the end of this information.

Morning of the appointment:

You should have nothing to eat after 09.30am on the morning of the procedure. Do not take your morning dose of tablets or injection but bring them with you to take after the procedure or with your evening meal using the same guidelines as for a morning procedure.

Report to nursing staff if you have needed glucose before arriving, and inform them immediately if you feel hypoglycaemic at any time during your visit.

Alternatives to Glucose Tablets

- Lucozade Sport 200mls (13 tablespoons)
- Grape Juice 100mls (six tablespoons)
- Sparkling apple juice 200mls (13 tablespoons)
- Coke or Pepsi (not diet) 200mls (13 tablespoons)
- Ribena 30mls (two tablespoons) diluted
- Squash / barley water 70mls (four tablespoons) diluted
- Sugar four teaspoons dissolved in 200mls of water

This booklet was produced by:

The Endoscopy Team at the James Paget University Hospitals NHS Foundation Trust.
Diabetic patient information ratified by Dr Joanne Randall, Consultant Endocrinologist.
This booklet was adapted from original documents produced St George's University Hospitals NHS Trust and Endoscopy Department and Guy's and St Thomas' NHS Foundation Trust.

Feedback

We want your visit to be as comfortable as possible. Please talk to the person in charge if you have any concerns. If the ward/ department staff are unable to resolve your concern, please ask for our Patient Advice and Liaison (PALS) information. Please be assured that raising a concern will not impact on your care. **Before you leave the hospital you will be asked to complete a Friends and Family Test feedback card.** Providing your feedback is vital in helping to transform NHS services and to support patient choice.

TRUST VALUES: We CARE for...
our patients... each other... ourselves

BEHAVIOURS:

- Courtesy and respect
- Attentively kind and helpful
- Responsive communication
- Effective and professional

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IN TRAN
communication for all

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