

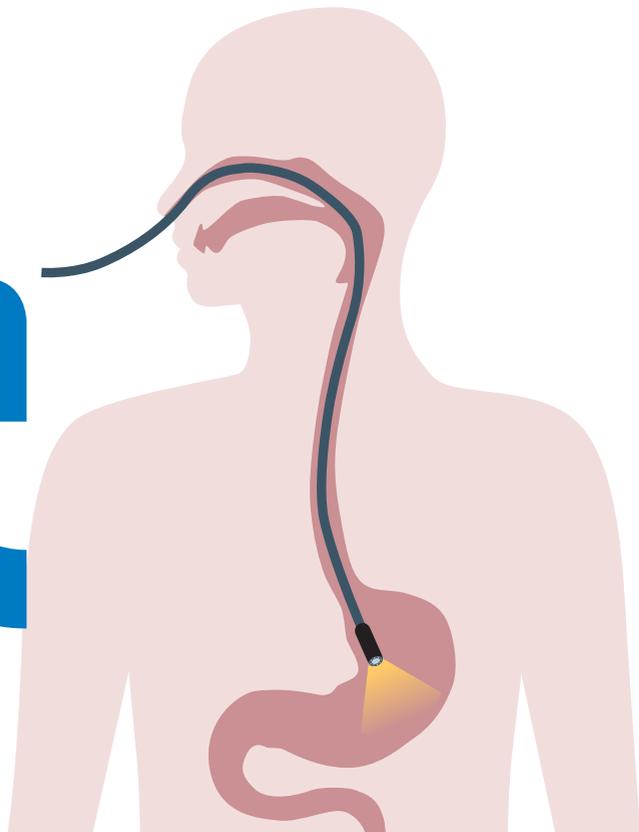
Trans-Nasal Endoscopy (TNE)



Endoscopy Centre
The James Cook University Hospital
& Friarage Hospital Northallerton



Patient information
Planned Care Centre



This booklet describes the purpose of your procedure and what is involved for you. Please read this carefully before coming for the procedure so that you can be reassured about what will happen when you attend the Endoscopy unit.

Outpatient test – This booklet should provide you with the all the basic information about the test:

- Some patients are referred directly for a Trans-Nasal Endoscopy by their GP or a hospital clinician. In addition to this booklet you will be given the opportunity to ask any questions about the procedure.
- Other patients will have been given the opportunity to ask any questions about the procedure when attending either an outpatient clinic appointment before the test or at the hospital pre-assessment visit.

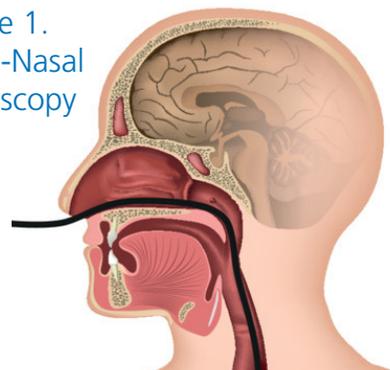
Despite this, occasionally questions about the procedure remain. If you have any major concerns before you attend then you should contact 01642 854845 for The James Cook University Hospital (JCUH) appointments and 01609 764853 for Friarage Hospital Northallerton (FHN) appointments.

Inpatient test - The medical and nursing staff responsible for your care will be able to answer your questions regarding the procedure.

What is a Trans-Nasal Endoscopy?

A Trans-Nasal endoscopy is a procedure where a flexible tube is passed down through the nose then down over the back of the tongue to examine the gullet / swallowing tube (Oesophagus), Stomach and part of the Duodenum (see figure 1).

Figure 1.
Trans-Nasal
Endoscopy



It is about as thick as your little finger. The endoscope relays images back to a monitor where they can be reviewed by the Endoscopist – person performing the procedure- whilst they are performing the examination.

In some cases (and often routinely) it may be necessary to take biopsies (small samples of tissue), using tiny forceps. The samples are sent to the laboratory for analysis using a microscope. Taking biopsies is painless and very safe.

It is important to note that the flexible tube passes down your gullet avoiding your trachea (breathing pipe). You can breathe normally throughout the whole procedure.

How may a Trans-Nasal Endoscopy procedure help?

You may have complained of some form of indigestion, heartburn or another problem, such as difficulty swallowing, nausea, vomiting, feeling full quickly when eating or losing weight. Alternatively you may have been found to be anaemic (low blood count), having a review of the gullet lining when a condition called Barrett's Oesophagus has been diagnosed or trying to diagnose, exclude or follow up a condition called Coeliac disease.

This examination allows the endoscopist (the doctor or nurse performing the procedure) to obtain a very clear view and thoroughly inspect your Oesophagus (swallowing tube), Stomach and first part of your small bowel (Duodenum). Although the endoscope passes through the nasal passages the endoscopist is



Example of the appearance, at TNE, of an ulcer in the bottom of the stomach

performing the procedure to diagnose and treat symptoms of the upper Gastro-Intestinal or digestive tract. Any obvious abnormalities of the nasal passages noted during the procedure may need follow up by another specialist. Usually, this is done at a later date.

A Trans-Nasal Endoscopy tells us if there is any obvious reason for your symptoms (e.g. an ulcer) and helps us to work out the best way to treat it. Disease can then be either ruled out or diagnosed accurately.

Do not be surprised if appearances are all normal because many patients have symptoms without any visible abnormality!

Small samples (or biopsies) are often taken and sent to the laboratory for examination - even if no obvious abnormality is seen. These may, for example, show inflammation or infection.

Is there an alternative?

Your doctor has requested a Trans-Nasal Endoscopy because they feel this is the best way of identifying or ruling out a problem in your upper Gastro-Intestinal tract.

Upper Gastro-Intestinal endoscopy can also be performed through the mouth (**trans-oral endoscopy**). However, there are advantages to having a trans-nasal endoscopy rather than a trans-oral one.

These include:

- Patients are more relaxed, as gagging is much less common.
- This means more successfully completed procedures.
- You will be able to talk during your procedure and tell your endoscopist about any discomfort.
- Less time is needed to recover after the procedure.
- No sedation is used so you can drive home, return to work, and do not require anybody to accompany you to your appointment.

- Because no sedation is used the test findings and next steps in your treatment can be discussed immediately after the procedure.

The upper Gastro-Intestinal tract can also be examined by a barium meal x-ray test:

- This would involve you drinking a thick milky like mixture. The outline of the Oesophagus, Stomach and Duodenum will then show up when x-ray pictures are taken of you.
- To co-operate with the test it would be necessary for you to move position several times on the x-ray table.
- No sedation is given.
- This test has even less risk than a Gastroscopy. However, biopsies cannot be taken and so some problems such as mild inflammation and early diseases could well be missed.
- In addition a Gastroscopy may still be needed if a barium x-ray suggests an abnormality.
- You would be exposed to a small dose of x-ray radiation.

If you think you might prefer either of these tests to a Trans-Nasal Endoscopy, then ask your doctor.

CT scans do not identify problems in the lining of the upper Gastro-Intestinal tract well and are not really a useful test to identify or rule out most problems in this area. They can sometimes be helpful when the exclusion of a very advanced serious problem is all that is required.

Not having a Trans-Nasal Endoscopy, Trans-Oral Gastroscopy or an alternative test would limit your doctor's ability to confirm the cause of your symptoms or condition. You should discuss this very carefully with your doctor. If you decide against having your procedure then please let the administrative team know so that the valuable appointment can be given to someone else.

When should you not have a TNE?

The appropriateness of trans-nasal Endoscopy compared to trans-oral endoscopy needs to be considered very carefully in patients who have a history of a broken nose or previous nasal surgery such as rhinoplasty. If this applies to you please contact the department for advice well before your procedure.

Preparation

When you get your appointment

Please review the medications you take well in advance of your procedure.

If you take any of the following medications then please contact us on 01642 854845 for The James Cook University Hospital appointments and 01609 764853 for Friarage Hospital Northallerton appointments:

- **Anticoagulant medications** to thin the blood (Warfarin, Dabigatran, Rivaroxaban, Apixaban or Edoxaban) or **anti-platelet drugs** (Clopidogrel, Prasugrel or Ticagrelor). Some of these need to be stopped before endoscopic procedures and some require additional treatment if they are to be omitted.
- If you are a **diabetic on treatment with tablets or insulin**. Special arrangements are necessary if you need insulin.

It will be helpful to the endoscopy team if you bring all your medications with you.

On the day of the procedure

To allow a clear view, the gullet, stomach and duodenum must be completely empty. This also makes sure that you do not vomit.

This means that you should not have any food for at least six hours before the appointment time for the Gastroscopy. Clear fluid such as black tea, black coffee, squash or water can be taken up to two hours before the procedure. After this time you must remain 'nil by mouth'. This includes not chewing any gum.

It is important to follow this exactly or we may not be able to go ahead with the test or the test may fail and you would have to wait again for another appointment.

In the Endoscopy unit

Your appointment letter asks you to arrive at the Endoscopy unit 30 minutes in advance of your planned procedure time so that all the administrative and clinical checks can be performed before your Trans-Nasal Endoscopy takes place. Please note that although we do our best to work to appointment times the variable nature of the procedures undertaken in the endoscopy unit mean that you may experience a delay. Please be patient and bring something to occupy yourself during this time.

A nurse will talk to you first to make sure that you understand the procedure.

If you have not already done so, you will be asked to sign your consent form after you have had a final chance to ask questions and the clinician performing the test has ensured that the procedure remains appropriate for you.

The procedure will take about 10-15 minutes and you will be awake the entire time. You do not need to undress for your Trans-Nasal Endoscopy. It is recommended that you wear comfortable light clothing that is not tight fitting around your neck as you may feel quite warm during the procedure.

Shortly before your procedure you may be asked to take a lemon drink that has medication (Infacol) in it. This helps to reduce the bubbles in your stomach and allows the endoscopist a clear view during the test.

For Trans-Nasal Endoscopy local anaesthetic is used to numb the upper airways. This consists of a local anaesthetic spray (Lidocaine and Phenylephrine) which is applied into the nostrils.

In the endoscopy room

- You will be escorted into the endoscopy room where the endoscopist and nurse will introduce themselves.
- You will be asked to confirm your name and other details and the endoscopy team will make sure you and they agree that you have attended for the correct procedure.
- You may be asked to remove any false teeth, plates or dentures.
- You will be given the opportunity to ask further questions about the procedure before it begins.
- Shortly before the procedure begins further local anaesthetic will be sprayed into the nostril to assist in numbing the nasal passages so the procedure is more comfortable.
- The procedure can be carried out with you sitting in a chair or lying on your left hand side on a trolley.
- A nurse will make sure of your comfort and dignity at all times.
- If you want the procedure to be stopped at any time then you should say so or raise your hand. The endoscopist will stop the procedure and if you are still unable to continue they will end the procedure as soon as it is safe to do so.
- The nurse looking after you may place an oxygen probe on your finger to enable your heart rate and oxygen levels to be monitored during the procedure.

- Although it is not usually necessary, the nurse can remove any saliva produced during the procedure using a small suction tube. This avoids this causing any obstruction to breathing or going into the lungs.
- The endoscopist will introduce the endoscope into your nostril. It will then pass down your Oesophagus, Stomach and into your Duodenum. Your windpipe is deliberately avoided and you will be able to breathe as normal. During the examination you may be asked to swallow. You will be able to talk as normal. Small puffs of air or water may be passed into Oesophagus, Stomach or Duodenum this may make you feel a little bloated. If necessary you can belch or burp this air away but the test can be completed faster if you can wait until after it is finished.
- Occasionally it does not prove possible to pass the endoscope successfully through the nose. If this happens the endoscopist will discuss alternative methods of investigation with you.
- During the examination your tummy may feel bloated and slightly uncomfortable as a small amount of gas is pumped into the Stomach to allow all the folds to be fully examined. This gas quickly disperses within a few hours.
- A number of photographs are standardly taken during an examination and taking these does not mean that anything is wrong. Abnormalities are often also photographed to inform the doctors responsible for your care. These photographs are often added to the endoscopy report. In almost all cases you will be offered a copy of your report to take home. Separate copies will be sent to your General Practitioner and any other doctors involved in your care.
- As you are awake the results of the tests will be explained to you before you leave the procedure room.

Are there any risks?

Trans-nasal Endoscopy is generally a straightforward and very safe procedure. The endoscopy team will do everything they can to keep you as comfortable and safe as possible. However, a TNE is an invasive procedure and complications can occur.

The common risks and side effects to be aware of and consider before your procedure are:

- Slight nose or throat pain, this usually settles within a few hours.
- Nose bleeds happen in about 1 in 20 people who have a TNE. Most stop without the need for any treatment. However, a small number of patients (around 1 in 400 people) may require treatment for their bleeding nose.

Rare serious complications are:

- A small leak can be produced in the wall of the gullet, stomach or duodenum. This is called a perforation and the risk of this is about 1 in every 2000. If this were to happen, you would need to be admitted to hospital and it might require an operation to mend it.
- There is a small risk of bleeding after obtaining biopsies from the gastrointestinal tract. This risk is about 1 in every 5000. Bleeding usually settles spontaneously. If further endoscopic treatment is needed this may require the use of a trans-oral endoscopic for which more treatment equipment is available. You may require blood transfusion and in very rare circumstances an operation.
- Death associated with a Gastroscopy is incredibly rare with a risk of approximately 1 in 25,000.

There is a small risk of an allergic reaction to the local anaesthetic (numbing) spray administered (or less commonly the endoscopy equipment or other chemicals and substances used within the endoscopy unit) during the procedure.

Please contact the department if you are allergic to Lidocaine (Lignocaine) as this may affect your suitability for the procedure.

After the procedure

- Discharge after having a Trans-Nasal Endoscopy is quicker than other endoscopy procedures because sedation is not given and local anaesthetic is applied only to the nasal passages and not the throat.
- Before you leave the department your blood pressure and heart rate will be recorded. A nurse will check you do not have any significant bleeding or discomfort.
- A nurse will ensure you understand the report and any other information given to you by the endoscopist and answer any questions you may have.
- You should receive a copy of your report and a discharge instruction sheet. You should be informed about the next step in your care and how you will be informed of the results of any biopsies that have been taken. Usually this will either be by letter or at a forthcoming out-patient appointment.
- Before you go home you will be given a discharge information sheet, which details the procedure you have had and advise on aftercare and symptoms to be aware of following the procedure.
- You will usually be ready to go home around ten minutes after your procedure is finished.

Comments, compliments, concerns or complaints

South Tees Hospitals NHS Foundation Trust is concerned about the quality of care you receive and strives to maintain high standards of health care.

However we do appreciate that there may be an occasion where you, or your family, feel dissatisfied with the standard of service you receive. Please do not hesitate to tell us about your concerns as this helps us to learn from your experience and to improve services for future patients.

Patient Advice and Liaison Service (PALS)

This service aims to advise and support patients, families and carers and help sort out problems quickly on your behalf.

This service is available, and based, at The James Cook University Hospital but also covers the Friarage Hospital in Northallerton, our community hospitals and community health services. Please ask a member of staff for further information.

If you require this information in a different format please contact Freephone 0800 0282451

Author: Gastroenterology Directorate, Endoscopy Centre

Endoscopy Centre,
The James Cook University Hospital,
Marton Road, Middlesbrough, TS4 3BW
Switchboard: (01642) 850850

Endoscopy Unit,
Friarage Hospital, Bullamoor Road,
Northallerton, DL6 1JG.
Switchboard: (01609) 779911

Version 1, Issue Date: April 2018, Revision Date: April 2020