



York and Scarborough  
Teaching Hospitals  
NHS Foundation Trust

# Trans-Nasal Endoscopy (TNE)

Information for patients, relatives and carers

① For more information, please contact:

## **Endoscopy Unit**

York Hospital Patients:

The York Hospital  
Wigginton Road, York, YO31 8HE

Tel: 01904 726694

Scarborough Hospital Patients

Scarborough Hospital  
Woodlands Drive, Scarborough, YO12 6QL

Tel: 01723 385141

<b>Contents</b>	<b>Page</b>
Introduction .....	3
What is a Trans-Nasal Endoscopy?.....	4
How may a Trans-Nasal Endoscopy procedure help? ...	5
Is there an alternative? .....	7
Who should not have a TNE? .....	9
What should I do to prepare? .....	9
On the day of the procedure .....	10
What happens on the day?.....	11
What happens during the procedure?.....	13
Are there any risks? .....	16
What happens after the procedure? .....	18
Tell us what you think of this leaflet .....	19
Teaching, training and research.....	19
Patient Advice and Liaison Service (PALS).....	19
Leaflets in alternative languages or formats .....	20

The contents in this booklet are adapted from the contents of the TNE booklet published by South Tees Hospital NHS Foundation Trust with kind permission.

# Introduction

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 01904 726694 for York Hospital appointments or 01723 385141 for Scarborough Hospital 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 (endoscope) is passed down through the nose then down over the back of the tongue to examine the gullet / swallowing tube (oesophagus), stomach and first part of your small bowel (duodenum) (see figure 1).

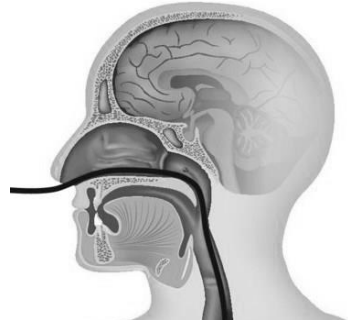


Figure 1.  
Trans-Nasal  
Endoscopy

The endoscope is a very thin tube (5 mm in diameter) which can be passed through your nose, down the back of your throat into your gullet. It 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.



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

This examination allows the endoscopist (the doctor or nurse performing the procedure) to obtain a very clear view and thoroughly inspect your oesophagus, stomach and duodenum. Although the endoscope passes through the nasal passages, the endoscopist is performing the procedure to diagnose and treat symptoms of the upper Gastrointestinal 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 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 (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 gastrointestinal tract. Upper Gastrointestinal Endoscopy (Gastroscopy) can also be performed though 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 gastrointestinal 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 gastrointestinal 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.



## Who should 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.

## What should I do to prepare?

### 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 01904 724527 for York Hospital appointments or 01723 342905 for Scarborough Hospital 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 TNE. 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.

## **What happens on the day?**

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 TNE 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 means 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 (FYCON173 Trans-nasal endoscopy) 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 TNE. We recommend 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 TNE local anaesthetic is used to numb the upper airways. This consists of a local anaesthetic spray (Lidocaine and Phenylephrine) applied into the nostrils.

## What happens during the procedure?

- 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 nostrils 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 GP 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.

There is a very small chance that we may miss significant abnormality. Equally, there is a possibility of an incomplete examination with the consequent need for another investigation.

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

- Slight nose or throat discomfort or pain, this usually settles within a few hours.
- Nosebleeds 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.
- Occasionally damage happens to the teeth and/or dental crowns.



## **Rare serious complications are:**

- A small leak can be produced in the wall of the gullet, stomach, or duodenum. This is called a perforation or tear 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.
- There is a small risk of depressed breathing due to sedation. If this happens, we will give you oxygen to help you breath more easily.
- 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.

## **What happens 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 outpatient 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.

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:

Sister Michelle Robinson, Endoscopy Unit,  
The York Hospital, Wigginton Road, York, YO31 8HE,  
telephone 01904 726690 or Sister Bev Taylor,  
Endoscopy Unit, Scarborough Hospital, Woodlands  
Drive, Scarborough, YO12 6QL, telephone 01723 385106.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [yhs-tr.patientexperienceteam@nhs.net](mailto:yhs-tr.patientexperienceteam@nhs.net).

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

[www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

Owner	Dr O Saraj, Endoscopy Clinical Lead, Scarborough Mr S Chintapatla, Endoscopy Lead, Surgery, York Dr P Kant, Endoscopy Lead, Medicine, York
Date first issued	March 2019
Review Date	June 2027
Version	2 (issued June 2024)
Approved by	Endoscopy Leads, York and Scarborough
Linked to consent form	FYCON173-1 Trans-nasal Endoscopy (TNE)
Document Reference	PIL 1307 v2
© 2024 York and Scarborough Teaching Hospitals NHS Foundation Trust. All Rights reserved.	