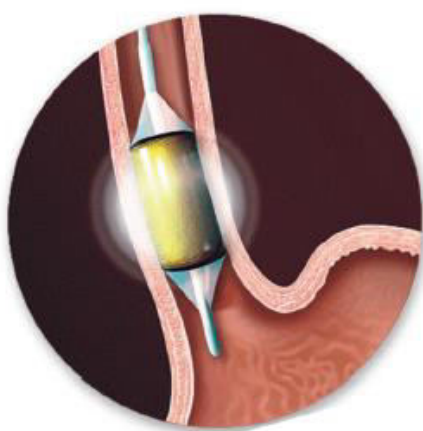
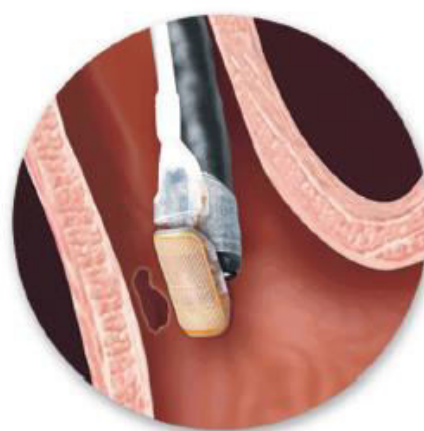


Information for Patients

HALO Radiofrequency Ablation



HALO 360 Device



HALO 90 Device

Please Note:

Your test may be carried out at any of the endoscopy sites across Manchester NHS Foundation Trust. Please check your appointment letter to make sure you attend the right unit.

You may need to start preparing for your test up to one week before your appointment. Please ensure you read this information in good time to ensure you know what to do. Poor preparation can result in cancellations and incomplete procedures.

If you are unable to keep your appointment, please telephone the Waiting List Office as soon as possible via the number on your appointment letter. Your appointment can then be offered to someone else which helps to keep waiting lists shorter.

Thank you.

Introduction

Your doctor has advised you to have a test called a HALO radiofrequency ablation procedure. This booklet has been written to inform you about the test and to answer the most frequently asked questions. If you have more questions, or if there is anything that you do not understand, please ask. There is a phone number on your appointment letter.

What is HALO Radiofrequency Ablation?

This test combines an endoscopic assessment and treatment of your oesophagus (gullet). The endoscope used is a fairly thin flexible tube about as thick as an adult's index finger which you will have had previously to assess your gullet. The HALO treatment comprises an electrode either wrapped around a balloon (HALO 360) placed into your gullet alongside the endoscope or mounted on the end of the endoscope (HALO 90). These devices allow an electric current to be applied to the lining of your gullet to remove any pre-cancerous cells during the procedure.

Important information

Please make an appointment with your GP in advance of your procedure and take a copy of your letter and this booklet. Your GP will need to prescribe the following medications as it is likely that you will feel some pain or discomfort around your oesophagus for 7 -14 days after the test:

- Soluble Co-codamol 30/500 up to four times daily for 5 days
- Gaviscon Advance 10ml up to four times daily
- Please ensure that you have an adequate supply of your regular proton pump medication that you are already on. Commonly used medicines include Omeprazole, Lansoprazole or Esomeprazole.

Why do I need the test?

Your previous endoscopy tests have shown an abnormal area of tissue within your gullet called dysplasia. In order to remove the dysplasia and reduce the risk of cancer development within the gullet radiofrequency ablation is used. This removes the abnormal cells by burning them and allows re-growth of normal healthy tissue.

Most people need two to three visits with repeated HALO treatment to remove all the abnormal cells. There is usually a three month gap between treatments to allow the gullet to heal. Once treated, you will need to attend for yearly monitoring with endoscopy.

Preparation for the test

It is important that your stomach is empty for the test to be successful. Therefore-

- You must not have anything to eat or drink for at least 6 hours before your test.
- You may then have small sips of water only, up to 2 hours before your test.

Should I take my usual tablets or medications?

Blood Thinning Tablets

Before stopping any of the below medications please seek advice from your GP or Consultant to ensure that it is safe to do so.

Tablet Name	Advice
Warfarin Synthron	Should be stopped for 5 days before the test. Please contact endoscopy if you have been advised that you should not stop this medication.
Apixiban Edoxaban Fondaparinux Rivaroxaban Dabigatran	Should be stopped for 3 days before the test. Patients with a coronary stent may need to take Aspirin. If you require further advice, or have been told not to stop these medications, please call us.
Asasantin Clopidogrel Dipyridamole Ticagrelor Prasugrel	Should be stopped for 7 days before the test. Please contact endoscopy if you have been advised that you should not stop this medication.
Clexane Dalteparin Enoxaparin Inhixa	Please call us. We may need to speak to your doctor for advice.

Aspirin does not need to be stopped.

If you are a diabetic treated with insulin or tablets:

- You will need an early morning appointment. If you have been given a later appointment, please contact us.
- You will need to contact your diabetes specialist (E.g. Diabetes clinic, GP, Practice Nurse) for advice on how to manage your diabetes.
- On the morning of your test, do not take your insulin or diabetic tablets.

All other medication normally taken in the morning may be taken as follows:

- Morning appointments - take your medication before 7am or bring it with you to take after your test.
- Afternoon appointments - take your medication before 10am.

Medical History

If you have a Pacemaker or Implantable Cardioverter Defibrillator (ICD), please contact the unit using the phone number on your appointment letter. Please ensure this has been checked within 12 months of your procedure, and that the technicians are happy that the device is fully operational. Please bring your ID card showing the make and model of the device.

Also, please let us know if you:

- Are pregnant or breast feeding
- Have had any surgery (including eye surgery) in the past 6 weeks
- Have had a heart attack within the last six weeks
- Are waiting for heart surgery
- Are waiting for coronary angioplasty
- Have a tracheostomy or laryngectomy.
- Are on peritoneal dialysis

Will I need sedation?

Yes, all HALO procedures are performed under sedation. You may have had a normal gastroscopy without sedation in the past, but this particular test does take longer so you will need sedation.

Sedation and/or a pain relief drug will be given as an injection into a vein in your hand or arm. The sedation will make you feel relaxed and less anxious but won't make you go to sleep. You will be awake and will still be able to communicate with us. Sedation may make you forgetful. Afterwards you may remember very little about the test.

You must have a responsible adult (18+) to take you home and look after you for 24 hours after having sedation. You will need to be collected from the Endoscopy Department directly. Do not travel home on public transport.

After having sedation you will be drowsy and small amounts of medication will remain in your body for up to 24 hours. During this period, although you may feel wide awake, you will still be under the influence of the sedation. Your concentration and co-ordination may be impaired and you may feel light-headed, faint or become forgetful. Due to this you must NOT do the following for 24hrs:

- Drive (you will not be covered by your insurance)
- Operate any machinery or electrical items such as kitchen appliances
- Drink alcohol, take recreational drugs, sedative drugs or sleeping tablets (the sedation may mean that the effects are greater)
- Sign any legally binding documents or make life changing decisions
- Return to work
- Be responsible for anyone else including children or elderly relatives

Throat spray

Before your test your throat will be sprayed to make it numb. Afterwards, the nurse will advise when it is safe to eat and drink.

How long will I be in hospital?

Your length of stay can vary, but on average you should expect to be in the department for up to 5 – 6 hours. If your test and recovery is complete, you may be ready to go home sooner.

We will always try to see you at your appointment time. However, please note that there are several factors that may cause unavoidable delays. We will endeavour to keep you informed of any major delays.

Do I need to bring anything with me?

Please bring:

- A copy of your most recent prescription or a list of your medication.
- A book or magazine to read whilst you are waiting.

Please do not bring any valuables with you. We cannot be responsible for loss or damage to personal property.

Visitors

Our Endoscopy Units are very busy and to ensure the privacy and dignity of all our patients we are unable to accommodate friends and relatives in the department. However, staff may assess your circumstances and make exceptions where necessary. For example:

- The patient concerned has specific additional needs or requirements
- The patient is 16 to 18 years of age
- The patient requires support with communication needs

During your test, friends and relatives can make use of on-site facilities for refreshments. If you are having sedation you will need to be collected from the department. Staff will contact friends and relatives by phone when you are ready if necessary.

If you would like to discuss your needs before arrival, please telephone the Endoscopy Department.

What happens when I arrive?

The receptionist will ask you a few questions and ask you to take a seat in the waiting room. A nurse will then take you to a private area where:

- Your personal details will be checked.
- You will be asked some questions about your general health.
- Your blood pressure, pulse and oxygen level will be recorded.
- Your test will be explained and your questions answered.
- Arrangements for going home and aftercare will be checked. If the person that is collecting you is not present, we will need to call them to confirm they are available to collect you.
- A needle will be inserted into the back of your hand or arm. The needle will be removed and a soft plastic tube left in place. This will be used to give your sedation or a medicine to relax the bowel during the test.
- If you are a diabetic your blood sugar level will be checked before and after your test.
- If you are taking tablets to thin your blood, we will check the result of your most recent blood test. Occasionally, we may need to take another sample to make sure it is safe to carry out your test.
- You will be asked to take a seat in the sub-waiting area.

Our aim is to maintain your privacy and dignity at all times. Please raise any concerns or issues with endoscopy staff.

Before the test

Your admitting nurse, or the endoscopist, will make sure you understand the test before asking you to sign a consent form.

Please make sure you fully understand the test and any possible treatments before signing your consent form. You may ask questions about anything you are unsure of.

What happens during the test?

- When you enter the procedure room, additional checks will be completed (For example, your name, date of birth, allergies, medical history etc.).
- If you have dentures, you will be asked to take them out. We will give you a pot to put them in.
- Your throat will be sprayed with a banana flavour local anaesthetic to make it numb.
- You will be asked to lie down on your left hand side.
- A probe will be clipped on to your finger to monitor your breathing and heart rate. We may also periodically check your blood pressure.
- A mouth guard will be placed between your teeth (you will be given the option of placing this yourself if you wish). The mouth guard will prevent you from biting the scope.
- Sedation will be given just before the test starts.
- The flexible tube is passed through your mouth and into your stomach.
- Air is gently blown inside to expand your stomach to allow good views.
- We may take internal photographs. These images are only used for medical purposes. Your privacy will be respected.
- Tiny samples of tissue may be taken. This is painless.
- After the initial gullet assessment the endoscope will then be removed and either the HALO 90 attached to the endoscope and placed back into the gullet or the 360 balloon placed into the gullet alongside the endoscope. A controlled electric current is then applied to the gullet for a few seconds, this is the radiofrequency ablation part of the procedure and is done twice at each site in the gullet.
- Normally the test will take 30 - 45 minutes. At the end of your test, the flexible tube is easily removed.
- If you decide to watch your test on the monitor, please note that images are greatly magnified.

Who will be present during my test?

As a minimum:

- The Endoscopist.
- Two members of endoscopy nursing staff.

Sometimes, additional staff may be present, depending on circumstances on the day of your test:

- *A trainee Endoscopist, who may carry out your procedure under the supervision and guidance of a consultant Endoscopist.
- Another doctor in an observational capacity.
- A specialist nurse if required.
- *A student nurse or medical student on placement.

*The Trust participates in the training of doctors, nurses and other healthcare staff. Should you wish to discuss this during your visit, please speak to a member of the nursing staff.

After your test

- You will be transferred into the recovery area to rest.
- You will be monitored by the nurses until you are fully recovered.
- You may feel a little bloated with wind. This should settle quickly.
- The local anaesthetic spray can affect your swallowing so we will ask you not to eat or drink anything for an hour or until the numbness has subsided and your swallowing reflex has returned to normal. After this time, you will be able to have a drink and a snack although your throat may be a little sore for a few days. You will be advised to keep to a soft diet for the first 48 hours.
- A nurse will talk to you (in a private room) about the findings of your test and any follow-up. If you would like someone with you whilst receiving results, please inform the nurse. You will also be given written information about this and a discharge advice sheet. If we have taken biopsies (samples) during your test, you will be informed of the results either at a future out-patient appointment or by letter. If you have sedation, the person collecting you will need to speak with the nurse to know how to look after you before you can go home.
- Again, you will be able to ask any questions you have.

Problems following your test are unusual. When you leave the unit, we will provide you with a discharge advice sheet which will contain the possible after effects of your test and contact details should you need them.

Depending on the treatment carried out during your test, we may advise you to avoid lifting or strenuous activity, for up to two weeks after your test. On rare occasions we may also advise that you do not fly. Please can you contact the endoscopy unit if you are due to fly within two weeks of your appointment date for further advice or rescheduling of your appointment.

What are the benefits of having the test?

The test will enable us to treat your condition. If we find anything unusual, we may be able to treat it during your test.

What are the possible risks or complications of having this test?

The test is usually very safe. However, as with any procedure, there is a small risk of complications. These may include:

- Risk of damage to teeth or dental bridgework.
- A sore throat.
- Pneumonia, if stomach contents are inhaled.
- Changes to your heart rate and breathing caused by the sedation or the test itself.
- Bleeding (less than 1 in 100) caused by irritation of the lining of the gut by the endoscope, taking samples of tissue or other treatments carried out during your test.
- Perforation (less than 1 in 1000), where the endoscope causes a small tear in the gut.
- Chest pain (in up to ¼ of patients). Some chest discomfort is usual after the procedure but usually settles within a few hours. Occasionally the chest pain can be more severe and last up to one week. All patients are given a prescription for soluble pain relief medication to take home after the procedure.

- Difficulty swallowing. This is usually only for a day or two but in up to 5% of patients a narrowing of the gullet can occur (a stricture) which requires treatment by stretching with a balloon passed down an endoscope.

If you experience these complications, they can be minor and resolve themselves fairly quickly. However, sometimes you may need to stay in hospital for observation, have a blood transfusion, undergo a repeat endoscopic test or radiological test, or have an operation to repair damage.

Although complications are rare, you should get in touch with your GP straight away (or attend the nearest A&E department if your GP is not available) if you notice any of these symptoms in the 48 hours after your test:

- Severe stomach pain worsened by moving or coughing.
- Bleeding from the back passage that is persistent or severe, including blood clots.
- Pain in the tip of the shoulder.
- Persistent or increasing abdominal swelling.
- Shortness of breath.
- Very dark or blackish motions.

What are the discomforts of the test?

Some patients experience discomfort or abdominal pain during the test. This may be caused by the flexible tube and air being passed inside. This is rarely distressing enough to stop the test. We remove as much air as possible when the test is complete. You will be given an effective pain relieving injection before the procedure in addition to the sedation.

What will happen if I don't have the test?

This will vary depending on your individual circumstances. If you do not have the test your doctor may not be able to find the cause of your symptoms. Should you have any questions about this, please speak to your doctor.

Research

Manchester University NHS Foundation Trust is at the forefront of research into a variety of conditions. You may be asked to consider taking part in a clinical trial. If approached, further information will be provided and you will be asked for additional consent if you decide to proceed. You are under no obligation to take part in research. Deciding not to take part will not affect your care.

No Smoking or Vaping Policy

The NHS has a responsibility for the nation's health. Protect yourself, patients, visitors and staff by adhering to our no smoking policy. Smoking, and the use of e-cigarettes, is not permitted within any of our hospital buildings or grounds.

For some great information go to: www.nhs.uk/smokefree

Violence, aggression and harassment

We are committed to the wellbeing and safety of our patients and staff. Please treat others with the courtesy and respect that you expect to receive. Verbal abuse, harassment and physical violence are unacceptable and will lead to prosecution.

Comments, complaints, concerns and compliments

The Trust collects feedback from service users in order to give assurances we are providing the best patient care. During your visit, we will ask you to provide feedback on the service you have received by completing either a Friends and Family Test or What Matters To Me survey.

You will also be asked to complete our endoscopy specific patient survey form. This can be completed online or via a paper form which you can post back to us (a stamped addressed envelope will be provided). The endoscopy unit utilises this information to improve our service.

Other ways in which you can provide feedback are:

- Ask to speak to the ward or department manager. If you would like to discuss a concern or make a complaint, they may be able to help straight away.
- Complete the Family and Friends Test (FFT) online at mft.nhs.uk/fft. Please make sure that you select the correct hospital and ward/unit.
- Contact the Patient Advice and Liaison Service (PALS):
 - Telephone (0161) 276 8686.
 - Email pals@mft.nhs.uk.
 - Ask for a PALS information leaflet.

Check list

- Are you able to keep your appointment? If not have you phoned to cancel or change it?
- If you are worried or have any questions to ask, have you contacted us?
- If you are having sedation, have you arranged for an adult to take you home and look after you for 24 hours?
- If you are taking anticoagulants, such as Warfarin or Sintrome, have you been in touch with your anticoagulant clinic to have your clotting level checked within one week of your appointment?
- If you are a diabetic treated with Insulin or tablets:
 - Have you got a morning appointment? If not, please call to change it.

