

Endoscopic sutured gastroplasty (ESG)

Information for patients attending King's College Hospital site only

This information leaflet answers some of the questions you may have about having an endoscopic sutured gastroplasty (ESG). It explains the risks and the benefits of the procedure and what you can expect when you come to hospital. If you have any more questions, please do not hesitate to contact a member of staff.

Endoscopy Unit

Reception	020 3299 3599
Pre-assessment Clinic	020 3299 2775
Nurse's Station	020 3299 4079

Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

www.kch.nhs.uk

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Important information

Please make sure you read and follow the instructions in the following sections on pages 5 to 6:

- Do I need to prepare for the procedure?
- Do I need to stop taking my medication?
- What will I need on the day of the procedure?
- Things to remember

Failure to follow this advice will result in your appointment being cancelled.

What is an endoscopic sutured gastroplasty (ESG)?

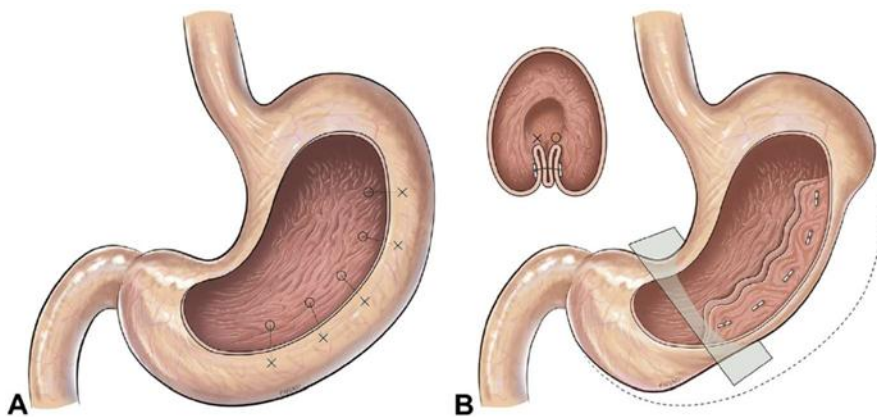


Diagram of the stomach before (A) and after ESG (B), showing the folds of the stomach with fixing sutures (inset) and how the stomach size has been reduced by the procedure.

Endoscopic sutured gastroplasty (ESG) is a procedure designed to reduce the size of the stomach, by placing stitches (sutures) on the inside and pulling them tight to fold the stomach in on itself (see diagram above). This means that your stomach can hold less food and you will feel full more quickly after eating.

ESG is a bariatric procedure, but unlike having an operation, there are no scars on your skin as the procedure is performed entirely from the inside, reducing the risk of complications and resulting in a shorter hospital stay. No parts of the stomach are removed.

Like other bariatric operations, you will need to make changes to your diet and lifestyle before and, very importantly, after the procedure.

It is performed by endoscopy alone, in a procedure like having a gastroscopy. We have a separate information leaflet on gastroscopy, which will be provided to you.

You have the procedure under a general anaesthetic (GA) so you will be asleep.

Why do I need this procedure?

You will only be recommended for the procedure after a thorough assessment by specialists in Obesity and Metabolic Medicine. You will have the opportunity to discuss whether ESG is right for you, including the risks and benefits, with the specialist performing the procedure before planning a date to go ahead.

ESG does not prevent you from having other bariatric procedures in the future, if they are required.

What are the benefits?

The ESG procedure is designed to help you lose weight gradually and in a healthy way. When back on a normal diet, you should experience a 'restriction' which means that you feel full more quickly and do not feel as hungry as you would normally expect to. These two effects will help to control your food intake, with guidance from our specialist dietitians and doctors, to ensure you get the best possible result.

What are the risks?

ESG is a safe procedure. Serious complications are very rare. Risks can include:

- **Bleeding.** You may bleed during the procedure. This will be controlled immediately by using the electrosurgical knife to cauterise (burn) the blood vessels. This could require a blood transfusion if severe, but such significant bleeding is not expected.
- **Perforation.** The risk of making a perforation (hole) in your stomach wall is less than 1 case in 100. We take every care to avoid this, but if it happens you will need to stay in hospital and may need surgery.
- **Aspiration** (inhalation of stomach contents) which may lead to pneumonia, happens rarely (less than 1%).
- **There is a chance that ESG does not work** and you do not lose (much) weight, or you begin to gain weight again after some time. This can be caused by multiple factors such as noncompliance to post-operative diet (so that the sutures loosen and make the ESG ineffective) and eating the wrong sorts of foods (high calorie). If you are disappointed with the results of the procedure, you will have the opportunity to discuss this with the doctors looking after you, at follow-up appointments and they will recommend a course of action.
- **Discomfort.** A sore throat is common for a few days after the procedure.
- **Dislodged teeth, crowns or bridgework.** There is a small chance that loose teeth, crowns or bridgework can be dislodged during the procedure. If you have any of these, please inform the anaesthetist beforehand.
- **Drug reactions** are very rare. The anaesthetist who gives you the GA will discuss this with you before the procedure. Please see the section 'What happens when I go home?' on page 8, to know what symptoms to look out for in the first week and what to do about them.

As a result of any of the above risks, there is the possibility that you may be admitted to the hospital for observation or further treatment.

Are there any alternatives?

There are a number of bariatric procedures and operations, of which ESG is a relatively new (but tried and tested) option. The possibility and types of surgery will be discussed with you as part of your initial consultation but if you wish to have this information again, please let your doctor know.

If you do not wish to have an operation, some doctors will offer to place a gastric balloon. This service is not offered at King's, but if you wish to discuss this or any other procedure you have researched yourself, you can discuss this with your doctors at any time.

Do I need any tests before the ESG?

You may need blood tests, liver scans (ultrasound or Fibroscan™), and other tests to ensure the general anaesthetic can be given safely.

Do I need to have a general anaesthetic?

All ESGs are performed under general anaesthetic (GA). You will be unconscious during the test and you will have a thin tube inserted into your lungs to help you breathe.

Someone must come to collect you and take you home afterwards. You must not travel home in a taxi alone. We cannot give you a GA unless you arrange this. The effects of the GA can last longer than you think. Please see 'Advice after having a general anaesthetic' on page 8.

Some patients may need to be admitted overnight for observation. This should be discussed with you during your pre-assessment.

Will it hurt?

This procedure will be performed under general anaesthetic (GA) and therefore you will not experience pain or discomfort during the procedure.

After the procedure, you will almost certainly experience stomach pain. This can be quite severe but does not mean anything has gone wrong. It is a normal, expected consequence of the procedure. We will give you painkillers while in hospital and to take when at home to control this.

Do I need to prepare for the procedure?

If you are expecting to go home after the procedure you must arrange someone to collect you from the department and stay with you for at least the first 24 hours. We cannot give you a general anaesthetic unless you arrange this:

- see 'Do I need to have a general anaesthetic?' above
- see 'Advice after having a general anaesthetic' on page 8 for advice about things you should not do during the first 24 hours after having general anaesthetic

If clinically required, some patients may be admitted overnight for observation. This should be discussed with you during your pre-assessment.

This procedure requires you to have a nursing pre-assessment before the date of your procedure. If we are unable to contact you for your pre-assessment, we will not be able to advise you how to prepare for your procedure. Therefore, the procedure may be cancelled on the day.

Your stomach must be empty to allow us clear views:

- you should start a liquid diet 72 hours (three full days) before the procedure – you will be provided with a separate information leaflet about the liquid diet
- you must have clear fluids only six hours before your procedure
- you must stop drinking liquids (nil by mouth) for two hours before your procedure time

Do I need to stop taking my medication?

If you are taking any medication which you have been told may thin your blood, inform the nurse during your pre-assessment. You may need to stop taking it for a short time.

If you are taking any other medications, including for diabetes, discuss with the pre-assessment nurse if they need to be stopped before the procedure.

What will I need on the day of the procedure?

- Please wear comfortable, loose clothing.
- Please bring a list of any medications that you are currently taking.
- Please bring your reading glasses as you will need to read and sign your consent form.
- You may want to bring something to read while you wait or headphones to listen to music or a podcast.
- Please bring your appointment letter if you were sent one.
- You will need to change into a hospital gown for your test, so you may want to bring a dressing gown and slippers to wear for walking to the toilet.
- Please bring a reusable bag to put your belongings in while you are having your test or procedure.
- Please consider walking or using public transport on your way to the hospital, if you can, to reduce the carbon footprint of your appointment.
- If you use a NIPPY ventilator at home for sleep apnoea, please remember to bring it with you.
- There is no general public car parking at King's College Hospital, Denmark Hill site. Please see the following website for further information:
<https://www.kch.nhs.uk/patientsvisitors/getting-to-kings/parking>

Things to remember

- Your appointment time is the time you are expected to arrive in the department. However, if you are not staying in the hospital overnight, you should plan to be in the Endoscopy Unit for the whole day. The department has five rooms running at the same time and accommodates emergencies. Someone with a later appointment than you may be seen before you. If you have any concerns, please ask a member of staff.
- Please do not bring children with you unless there is someone to look after them. We do

not have any childcare facilities in the unit.

- We cannot take responsibility for any valuables, but your things will always be kept with you (on a shelf on the examination trolley).
- The waiting room has limited seating. Only one escort can remain in the waiting room throughout your stay. They will not be allowed into clinical areas.

What happens when I arrive for my procedure?

When you arrive, a nurse will complete the health assessment form with you if you have not already done so. The endoscopist will come and explain the procedure to you. An anaesthetist will also see you.

Consent

We must by law obtain your written consent to any procedures beforehand. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to ask to speak with a senior member of staff.

What happens before the procedure?

We will ask you to change into a hospital gown in a changing cubicle and then make you comfortable while you wait for your procedure.

A nurse or doctor will put a cannula into your arm or hand. This is a very thin plastic tube through which they can give you any medication required. You will then be taken into the procedure room.

A nurse will attach you to a monitor so your vital signs can be measured during the procedure. Once the anaesthetic is working, the anaesthetist will gently push a breathing tube into your throat. The procedure will start when the anaesthetist is satisfied the general anaesthetic has taken full effect.

How long does the procedure take?

The procedure usually takes about 60 minutes. Sometimes, depending on the shape of your stomach and how many stitches the doctor decides to place, it can take a bit longer.

The doctor will make this decision during the procedure as it does depend on what is seen at endoscopy. We can only give you this estimate, but you will be under general anaesthetic and kept safe during the procedure.

What happens after the procedure?

You should plan to be in the Endoscopy Unit for the whole day. This is to give you time to recover and allow for any unexpected delays. You will need to stay until the effects of the general anaesthetic have reduced.

If you are staying overnight, a nurse will take you to your allocated ward once you have recovered from the anaesthetic.

You will be allowed to drink water while in the recovery area, immediately you have woken up from the anaesthetic and can swallow safely. The doctor will come to see you at this stage to assess and explain how the procedure went.

How much weight loss should I expect and when?

In a number of studies with ESG, people have lost between 10 to 20% of their total body weight, on average. This usually occurs within the first year after the procedure and you should keep the weight off. This is not as dramatic a weight loss as you might expect with surgical procedures, but ESG is not an operation and does not prevent you from having one in the future.

The best results are achieved through a combination of having this procedure and committing to a change in diet and lifestyle, including choosing different foods and eating smaller portions (as mentioned above).

Advice after having a general anaesthetic

After a general anesthetic, you may feel tired, dizzy or weak. If you are going home after the procedure, you must have someone to collect you from the Endoscopy Unit and stay with you for at least the first 24 hours.

During the first 24 hours you should not:

- drive a car
- operate machinery (including kitchen appliances)
- drink alcohol
- take sleeping tablets
- sign legal documents
- look after young children and/or dependents alone

When will I get my results?

Before you leave, we will give you a copy of your test report and any instructions you need. We will also send a copy of the test report to your GP (home doctor).

What happens when I go home?

We will observe you very closely after the procedure for:

- severe chest or tummy pain
- distended (swollen) tummy
- fever (high temperature).

If you experience any of the above symptoms when you have gone home in the first week after the procedure, let us know immediately using the contact numbers on the front page of this leaflet.

Please contact your GP if you have any of the following symptoms:

- severe or continuous pain in your neck, chest or abdomen (tummy)
- persistent nausea or vomiting
- pooing black (tarry) stools
- temperature of 37.4°C and higher
- chills

When can I start eating normally again?

You cannot eat solid food and will only be able to have liquids (drinks, thin soups, milkshakes or liquid supplements) for three days after the procedure. For the next seven days after this, you should have only soft, mushy or liquidised food. This is to help the stitches heal well. If you do not stick to this diet, there is a risk of loosening the stitches.

After surgical sleeve gastrectomy, a restricted diet is recommended for a total of eight weeks. Many people opt to follow this plan after an ESG, but it is not necessary. You will be provided with a separate information leaflet about the restricted diet.

After this, you can begin to eat 'normal' food but you will need to eat smaller portions of food than before (although you will also feel full anyway so may not feel like eating as much). You should focus on not eating big meals from now on and eating more healthily. Our dietitians will help you create a plan that suits you.

Who can I contact with queries and concerns?

If you have any questions about ESG, before or after your procedure, 9am to 5pm, Monday to Friday, call Professor Hayee's secretary, tel 020 3299 6044.

At all other times, if you have concerns after your procedure, please call your GP (home doctor) or local Emergency Department (A&E). If you need to do this, ask that they contact Professor Hayee directly via King's switchboard on 020 3299 9000. ESG is a highly specialist procedure and needs specialist input at all stages. We will also give you an emergency contact number.

The Endoscopy Department is working hard to reduce the impact of its service on the environment, to find out more please see <http://www.kch.nhs.uk/services/services-a-to-z/endoscopy/>

MyChart

Our MyChart app and website lets you securely access parts of your health record with us, giving you more control over your care. Visit www.kch.nhs.uk/mychart to find out more.

Sharing your information

King's College Hospital NHS Foundation Trust has partnered with Guy's and St Thomas' NHS Foundation Trust through the King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas' hospitals. King's College Hospital and Guy's and St Thomas' NHS Foundation Trusts share an electronic patient

record system, which means information about your health record can be accessed safely and securely by health and care staff at both Trusts. For more information visit www.kch.nhs.uk.

Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

PALS

The Patient Advice and Liaison Service (PALS) is a service that offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. They can also pass on praise or thanks to our teams.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: 020 3299 4618

Email: kings.pals@nhs.net

If you would like the information in this leaflet in a different language or format, please contact our Interpreting and Accessible Communication Support on 020 3299 4618 or email kings.access@nhs.net