

Patient information and consent to surgery for hyperhidrosis (excessive sweating)

Key messages for patients

- **Please read your admission letter carefully. It is important to follow the instructions we give you about not eating or drinking or we may have to postpone or cancel your operation.**
- Please bring with you any medications you use (including patches, creams and herbal remedies) and any information that you have been given relevant to your care in hospital, such as x rays or test results.
- Take your medications as normal on the day of the procedure **unless** you have been specifically told not to take a drug or drugs before or on the day by a member of your medical team. **Do not** take any medications used to treat diabetes.
- Please call the vascular surgery nurse practitioner on **01223 245151 extension 6382** if you have any questions or concerns about this procedure.
- **IMPORTANT –please remember to bring this form with you to the hospital on the day of your procedure.**

Please read this information carefully, you and your health professional will sign it to document your consent. After the procedure we will file the consent form in your medical notes and you may take this information leaflet home with you.

Important things you need to know

Patient choice is an important part of your care. You have the right to change your mind at any time, even after you have given consent and the procedure has started (as long as it is safe and practical to do so). If you are having an anaesthetic you will have the opportunity to discuss this with the anaesthetist, unless the urgency of your treatment prevents this.

We will also only carry out the procedure on your consent form unless, in the opinion of the responsible health professional, a further procedure is needed in order to save your life or prevent serious harm to your health. However, there may be procedures you do not wish us to carry out and these can be recorded on the consent form. We are unable to guarantee that a particular person will perform the procedure. However the person undertaking the procedure will have the relevant experience.

All information we hold about you is stored according to the Data Protection Act 1998.

About surgery for hyperhidrosis (excessive sweating)

Hyperhidrosis is the medical term for excessive sweating. Sweating is a natural process that is controlled by the body's autonomic nervous system, which controls body functions over which we have no conscious control. The part of the autonomic nervous system that is responsible for sweating is known as the sympathetic nervous system. The amount of sweating becomes 'abnormal' when it persistently exceeds the amount necessary for control of body temperature.

What causes hyperhidrosis? – Hyperhidrosis (excessive sweating) can be due to an overactive thyroid gland, diabetes mellitus or other endocrine disease, hormone treatment for other diseases, the menopause, obesity and some severe psychiatric disorders. However, in most cases, there is no underlying cause and this is called primary hyperhidrosis.

Primary hyperhidrosis usually begins in childhood or adolescence and persists throughout life. The sweating can be started or made worse by nervousness or anxiety but in affected people the amount of sweating is usually out of proportion to the emotions that are being experienced by the sufferer.

Are there different types of hyperhidrosis?

Yes - hyperhidrosis can affect one or more of the following body sites:

- **palmar (palm) hyperhidrosis:** excessive sweating of the hands. In very severe cases, the sweat can drip off the ends of the fingers, or the hands can constantly feel cold and clammy. This can affect the patient at school or work for example, shaking hands can be embarrassing and writing can be difficult because the ink is constantly smudged. Handling tools or valuable items can also be difficult.
- **plantar (sole) hyperhidrosis:** excessive sweating of the feet.
- **axillary (armpit) hyperhidrosis:** hyperhidrosis of the armpit can result in embarrassing wet patches on clothes, which can leave a 'salt ring' when the clothes dry.
- **facial hyperhidrosis:** excessive sweating of the face can result in sweat pouring down the face in conditions of stress; this can be distressing for the patient who can think others consider him nervous or insecure. This can result in problems with relationships at work or socially.

Before your procedure

Most patients attend a pre-admission clinic, when you will meet a nurse trained to prepare you for this procedure. At this clinic, we will ask for details of your medical history and carry out any necessary clinical examinations and investigations. Please ask us any questions about the procedure, and feel free to discuss any concerns you might have at any time.

We will ask if you take any tablets or use any other types of medication either prescribed by a doctor or bought over the counter in a pharmacy. Please bring any packaging with you.

This procedure involves the use of anaesthesia. We explain about the different types of anaesthesia or sedation we may use at the end of this leaflet. You will see an anaesthetist before your procedure.

This type of procedure can be performed as a day case or as an overnight hospital stay. Sometimes we can predict whether you will need to stay for longer than usual - your doctor will discuss this with you before you decide to have the procedure.

During the procedure

Before your procedure, you will be given the necessary anaesthetic - see below for details of this.

Excision of the axillary (armpit) sweat glands. In this surgery we remove the area of skin in the armpit causing most of the sweating. This can be useful, but the wounds can be difficult to heal and the scars may stretch. However, it is not a very visible area.

Thoracoscopic Cervical Sympathectomy. A sympathectomy operation aims to interrupt the sympathetic nerves that carry the sweating signals to the sweat glands. The nerves to the hands and face are the ones most easily treated by this technique and are all found within the chest region. This operation can now be performed using keyhole surgery (laparoscopy) through a small incision in the chest. This version of sympathectomy is known as endoscopic transthoracic (thoracoscopic) sympathectomy.

Diffuse hyperhidrosis of the trunk: if a patient has a general sweating of the whole body, this cannot be treated by sympathectomy.

When you are asleep, a small hole is made in the upper chest. The lung, on the side being operated upon, is allowed to collapse a little to make some working room. Meanwhile your other lung is capable of doing all the work. A camera on a thin telescope is then put into the chest to find the nerves which are to be divided. One or two other small holes are made to put in the instruments that divide the nerves. The lung is then re-expanded and the instruments removed.

Interestingly, patients who have both hyperhidrosis of the hands and feet have a good chance of improving sweating of the feet after an operation aimed at suppressing sweating in the hands. However, patients who have just hyperhidrosis of the feet can only be cured by an abdominal operation known as lumbar sympathectomy.

After the procedure

Once your surgery is completed you will usually be transferred to the recovery ward where you will be looked after by specially trained nurses, under the direction of your anaesthetist. The nurses will monitor you closely until the effects of any general anaesthetic have adequately worn off and you are conscious. They will monitor your heart rate, blood pressure and oxygen levels too. You may be given oxygen via a facemask, fluids via your drip and appropriate pain relief until you are comfortable enough to return to your ward.

Sometimes, people feel sick after an operation, especially after a general anaesthetic, and might vomit. If you feel sick, please tell a nurse and you will be offered medicine to make you more comfortable.



Eating and drinking. After the operation, you will be able to eat and drink when you are awake again. This usually takes two to four hours. How quickly you return to a normal diet will depend on how you feel. Most patients recover their appetite very quickly.



Getting about after the procedure. After this procedure, we will try to get you mobile (up and about) as soon as we can. This helps improve your recovery and reduces the risk of certain complications.



Leaving hospital. Although it is possible to have this operation as a day case, in certain cases you may be kept in overnight after the operation. Occasionally, if the lung takes some time to expand, you may have to stay in a little longer. Rarely, a small drain (plastic tube) is needed to help the lung expand.



Resuming normal activities including work. Most people who have had this procedure can resume normal activities after five to seven days. You might need to wait a little longer before resuming more vigorous activity. When you will be ready to return to work will depend on your usual health, how fast you recover and what type of work you do. Please ask your doctor for his/her opinion.



Special measures after the procedure: You will be given more detailed information about any special measures you need to take after the procedure. You will also be given information about things to watch out for that might be early signs of problems (for example, infection).



Check-ups and results: Before you leave hospital, we will give you a date to return to clinic for the results of your surgery. At this time, we can check your progress and discuss any further treatment that may be recommended.

Intended benefits

The purpose of the procedure is to reduce the amount of sweating.

Who will perform my procedure?

This procedure will be performed by the consultant vascular surgeon and the vascular surgical registrar.

Alternative procedures that are available

Surgery is usually only undertaken if the following non-surgical treatments have not improved the sweating:

- **antiperspirants:** this is the first-line treatment. We recommend the use of aluminium chloride (20 to 25%) in 70 to 90% alcohol, applied in the evening two to three times a week. This is generally effective in mild to moderate hyperhidrosis, but treatment has to be repeated regularly.
- **iontophoresis:** this is a treatment involving low-intensity electric current (15 to 18mA), which is applied to the palms and/or soles while they are immersed in an electrolyte solution in 20 minute sessions, several times a week. We aim to gradually increase the interval between treatments to every one to two weeks. Long-term treatment is difficult in axillary (armpit) hyperhidrosis and impossible for practical reasons in facial and trunk hyperhidrosis.
- **medications:** there are no specific medications for the symptoms of hyperhidrosis. Psychotropic and anticholinergic drugs, which have been tried, tend to have too many side effects to be acceptable to patients. In secondary hyperhidrosis, we can use medications to treat the underlying cause.
- **botulinum toxin injections:** Botulinum is a family of toxins produced by Clostridium Botulinum bacteria. This toxin interferes with the transmission of acetyl choline (ACH) at the nerve synapses (which is the contact point of one nerve cell with another nerve cell, muscle cell or gland) causing paralysis. In very low doses, the toxin can be used as a medical treatment for the relief of muscle spasm, and more recently in hyperhidrosis.

This treatment is most useful in axillary (armpit) hyperhidrosis. Injections of 50 to 100 units of Botulinum toxin into the skin of the armpit produce an effect lasting for six to twelve months. The drawbacks of this treatment include the cost and the need to repeat injections. However, the side effects seem to be negligible if the dosages are kept low.

- **hypnosis and alternative therapies:** There are no (systematic) studies of hypnosis and results so far appear patchy. Alternative remedies include homeopathy, massage, acupuncture and phytotherapeutic drugs however very few patients improve after these therapies.

Significant, unavoidable or frequently occurring risks of this procedure

Following the operation, you might experience chest wall pain from the wounds and also from the small amount of gas which irritates the lining of the lung. Painkillers usually control this well; discomfort beyond seven days is unusual.

There is a rare chance (less than one per cent) of pneumothorax. This is where the lung collapses from too much gas or air around the lung.

There is a rare chance (less than one per cent) of Homers syndrome. This involves damage to the sympathetic nerve to the eye – resulting in a small pupil and slight droop of the eyelid.

Compensatory sweating: Commonly there is increased sweating in other areas of the body. This can be severe enough to become a new problem (in 5 to 10 % of cases). In most cases the increased sweating is mild and not a major problem.

The operation may fail to control sweating in about five per cent of cases.

Wound infection is uncommon (one to two per cent of cases).

Anaesthesia

Anaesthesia means 'loss of sensation'. There are three types of anaesthesia: general, regional and local. **The type of anaesthesia chosen by your anaesthetist depends on the nature of your surgery as well as your health and fitness.** Sometimes different types of anaesthesia are used together.

Before your operation

Before your operation you will meet an anaesthetist who will discuss with you the most appropriate type of anaesthetic for your operation, and pain relief after your surgery. To inform this decision, he/she will need to know about:

- your general health, including previous and current health problems
- whether you or anyone in your family has had problems with anaesthetics
- any medicines or drugs you use
- whether you smoke
- whether you have had any abnormal reactions to any drugs or have any other allergies
- your teeth, whether you wear dentures, or have caps or crowns.

Your anaesthetist may need to listen to your heart and lungs, ask you to open your mouth and move your neck and will review your test results.

Pre-medication

You may be prescribed a 'premed' prior to your operation. This a drug or combination of drugs which may be used to make you sleepy and relaxed before surgery, provide pain relief, reduce the risk of you being sick, or have effects specific for the procedure that you are going to have or for any medical conditions that you may have. Not all patients will be given a premed or will require one and the anaesthetist will often use drugs in the operating theatre to produce the same effects.

Moving to the operating room or theatre

You will usually change into a gown before your operation and we will take you to the operating suite. When you arrive in the theatre or anaesthetic room, monitoring devices may be attached to you, such as a blood pressure cuff, heart monitor (ECG) and a monitor to check your oxygen levels (a pulse oximeter). An intravenous line (drip) may be inserted and you may be asked to breathe oxygen through a face mask.

It is common practice nowadays to allow a parent into the anaesthetic room with children; as the child goes unconscious, the parent will be asked to leave.

Before starting your anaesthesia the medical team will perform a check of your name, personal details and confirm the operation you are expecting."

General anaesthesia

During general anaesthesia you are put into a state of unconsciousness and you will be unaware of anything during the time of your operation. Your anaesthetist achieves this by giving you a combination of drugs.

While you are unconscious and unaware your anaesthetist remains with you at all times. He or she monitors your condition and administers the right amount of anaesthetic drugs to maintain you at the correct level of unconsciousness for the period of the surgery. Your anaesthetist will be monitoring such factors as heart rate, blood pressure, heart rhythm, body temperature and breathing. He or she will also constantly watch your need for fluid or blood replacement.

Regional anaesthesia

Regional anaesthesia includes epidurals, spinals, caudals or local anaesthetic blocks of the nerves to the limbs or other areas of the body. Local anaesthetic is injected near to nerves, numbing the relevant area and possibly making the affected part of the body difficult or impossible to move for a period of time. Regional anaesthesia may be performed as the sole anaesthetic for your operation, with or without sedation, or with a general anaesthetic. Regional anaesthesia may also be used to provide pain relief after your surgery for hours or even days. Your anaesthetist will discuss the procedure, benefits and risks with you.

Local anaesthesia

In local anaesthesia the local anaesthetic drug is injected into the skin and tissues at the site of the operation. The area of numbness will be restricted and some sensation of pressure may be present, but there should be no pain. Local anaesthesia is used for minor operations such as stitching a cut, but may also be injected around the surgical site to help with pain relief. Usually a local anaesthetic will be given by the doctor doing the operation.

Sedation

Sedation is the use of small amounts of anaesthetic or similar drugs to produce a 'sleepy-like' state. Sedation may be used as well as a local or regional anaesthetic. The anaesthesia prevents you from feeling pain, the sedation makes you drowsy.

Sedation also makes you physically and mentally relaxed during an investigation or procedure which may be unpleasant or painful (such as an endoscopy) but where your co-operation is needed. You may remember a little about what happened but often you will remember nothing. Sedation may be used by other professionals as well as anaesthetists.

What will I feel like afterwards?

How you will feel will depend on the type of anaesthetic and operation you have had, how much pain relieving medicine you need and your general health.

Most people will feel fine after their operation. Some people may feel dizzy, sick or have general aches and pains. Others may experience some blurred vision, drowsiness, a sore throat, headache or breathing difficulties.

You may have fewer of these effects after local or regional anaesthesia. When the effects of the anaesthesia wear off you may need pain relieving medicines.

What are the risks of anaesthesia?

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to you as an individual will depend on whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or performed in an emergency.

Very common (1 in 10 people) and common side effects (1 in 100 people)

Feeling sick and vomiting after surgery
Sore throat
Dizziness, blurred vision
Headache
Bladder problems
Damage to lips or tongue (usually minor)
Itching
Aches, pains and backache
Pain during injection of drugs
Bruising and soreness
Confusion or memory loss

Uncommon side effects and complications (1 in 1000 people)

Chest infection
Muscle pains
Slow breathing (depressed respiration)
Damage to teeth
An existing medical condition getting worse
Awareness (becoming conscious during your operation)

Rare (1 in 10,000 people) and very rare (1 in 100,000 people) complications

Damage to the eyes

Heart attack or stroke

Serious allergy to drugs

Nerve damage

Death

Equipment failure

Deaths caused by anaesthesia are very rare. There are probably about five deaths for every million anaesthetics in the UK. For more information about anaesthesia, please visit the Royal College of Anaesthetists' website: www.rcoa.ac.uk

Information about important questions on the consent form

1 Creutzfeldt Jakob Disease ('CJD')

We must take special measures with hospital instruments if there is a possibility you have been at risk of CJD or variant CJD disease. We therefore ask all patients undergoing any surgical procedure if they have been told that they are at increased risk of either of these forms of CJD. This helps prevent the spread of CJD to the wider public. A positive answer will not stop your procedure taking place, but enables us to plan your operation to minimise any risk of transmission to other patients.

2 Photography, Audio or Visual Recordings

As a leading teaching hospital we take great pride in our research and staff training. We ask for your permission to use images and recordings for your diagnosis and treatment, they will form part of your medical record. We also ask for your permission to use these images for audit and in training medical and other healthcare staff and UK medical students; you do not have to agree and if you prefer not to, this will not affect the care and treatment we provide. We will ask for your separate written permission to use any images or recordings in publications or research.

3 Students in training

Training doctors and other health professionals is essential to the NHS. Your treatment may provide an important opportunity for such training, where necessary under the careful supervision of a registered professional. You may, however, prefer not to take part in the formal training of medical and other students without this affecting your care and treatment.

4 Use of Tissue

As a leading bio-medical research centre and teaching hospital, we may be able to use tissue not needed for your treatment or diagnosis to carry out research, for quality control or to train medical staff for the future. Any such research, or storage or disposal of tissue, will be carried out in accordance with ethical, legal and professional standards. In order to carry out such research we need your consent. Any research will only be carried out if it has received ethical approval from a Research Ethics Committee. You do not have to agree and if you prefer not to, this will not in any way affect the care and treatment we provide. The leaflet '*Donating tissue or cells for research*' gives more detailed information. Please ask for a copy.

If you wish to withdraw your consent on the use of tissue (including blood) for research, please contact our Patient Advice and Liaison Service (PALS), on **01223 216756**.

Information and support



We will give you additional information in the form of patient information leaflets. Please contact the vascular surgery nurse practitioner 01223 245151 extension 6382 if you have any questions or anxieties.

Further information is available from

The Vascular Society Website: <http://www.vascularsociety.org.uk>



Privacy & Dignity

Same sex bays and bathrooms are offered in all wards except critical care and theatre recovery areas where the use of high-tech equipment and/or specialist one to one care is required.



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We are currently working towards a smoke free site. Smoking is only permitted in the designated smoking areas. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800

Help with this leaflet



If you would like this information in large print, another language or in audio format, please ask the department to contact Patient Information on 01223 216032 or

patient.information@addenbrookes.nhs.uk



Document history

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Consent Form

Surgery for hyperhidrosis

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

A Patient's side left / right or N/A

Consultant or other responsible health professional

Name and job title:

Any special needs of the patient (e.g. help with communication)?

Please use 'Procedure completed' stamp here on completion:

B Statement of health professional (details of treatment, risks and benefits)

1 I confirm I am a health professional with an **appropriate knowledge of the proposed procedure**, as specified in the hospital's consent policy. I have explained the procedure to the patient. In particular, I have explained:

a) the intended benefits of the procedure (please state)

The purpose of the procedure is to reduce the amount of sweating.

b) the possible risks involved. Addenbrooke's always ensures any risks are minimised. However all procedures carry some risk and I have set out below any significant, unavoidable or frequently occurring risks including those specific to the patient

- you might experience chest wall pain from the wounds and also from the small amount of gas which irritates the lining of the lung.
- a rare chance of pneumothorax
- a rare chance of Homers syndrome
- compensatory sweating
- the operation may fail to control sweating
- wound infection (uncommon)

c) what the treatment or procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient:

Consent Form

Surgery for hyperhidrosis

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

d) any extra procedures that might become necessary during the procedure such as:

Blood transfusion

Other procedure (please state)

The following information leaflet has been provided:

Surgery for hyperhidrosis

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or I have offered the patient information about the procedure but this has been declined.

3 This procedure will involve:

General and/or regional anaesthesia

Local anaesthesia

Sedation

None

Signed (Health professional): Date: / /

Name (PRINT): Time (24hr): : :

Designation: Contact/bleep no:

C Consent of patient / person with parental responsibility

I confirm that the risks, benefits and alternatives of this procedure have been discussed with me and that my questions have been answered to my satisfaction and understanding.

Important: please read the patient information about this procedure and then put a tick in the relevant boxes for the following questions:

1 Creutzfeldt Jakob disease (CJD)

Have you ever been notified that you are at risk of CJD or variant CJD for public health purposes? If yes, please inform your health professional.

Yes No

2 Photography, Audio or Visual Recording

a) I agree to the use of any of the above type of recordings for the purpose of diagnosis and treatment.

Yes No

b) I agree to unidentified versions of any of the above recordings being used for audit and medical teaching in a healthcare setting.

Yes No

3 Students in training

I agree to the involvement of medical and other students as part of their formal training.

Yes No

Consent Form

Surgery for hyperhidrosis

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

4 Use of Tissue

a) **I agree** that tissue (including blood) not needed for my own diagnosis or treatment can be used and stored for ethically approved research which may include ethically approved genetic research.

Yes No

b) *Where additional clinical information is needed for the purposes of ethically approved research, I agree* that relevant sections of my medical record may be looked at by researchers or by relevant regulatory authorities. I give permission for these individuals to have access to my records.

Yes No

I have listed below any procedures that **I do not wish to be carried out without further discussion.**

I have read and understood the Patient Information about this procedure and the above additional information. **I agree** to the procedure or treatment.

Signed (Patient): Date: *DD/MM/YYYY*

Name of patient (PRINT):

If signing for a child or young person; delete if not applicable.

I confirm I am a person with **parental responsibility** for the patient named on this form.

Signed: Date: *DD/MM/YYYY*

Relationship to patient:

If the patient is unable to sign but has indicated his/her consent, a witness should sign below.

Signed (Witness): Date: *DD/MM/YYYY*

Name of witness (PRINT):

Address:

Consent Form

Surgery for hyperhidrosis

For staff use only:

Hospital number:

Surname:

First names:

Date of birth:

NHS no: _ _ _ / _ _ _ / _ _ _ _

Use hospital identification label

D Confirmation of consent

Confirmation of consent (where the treatment/procedure has been discussed in advance)

On behalf of the team treating the patient, I have confirmed with the patient that she/he has no further questions and wishes the treatment/procedure to go ahead.

Signed (Health professional): Date: D D / M M / Y Y Y Y

Name (PRINT): Job title:

Please initial to confirm all sections have been completed:

E Interpreter's statement (if appropriate)

I have interpreted the information to the best of my ability, and in a way in which I believe the patient can understand:

Signed (Interpreter): Date: D D / M M / Y Y Y Y

Name (PRINT):

Or, please note the language line reference ID number:

F Withdrawal of patient consent

The patient has withdrawn consent (ask patient to sign and date here)

Signed (Patient): Date: D D / M M / Y Y Y Y

Signed (Health professional): Date: D D / M M / Y Y Y Y

Name (PRINT): Job title: