Hyperhidrosis
Excessive sweating and facial blushing

Introduction
This leaflet provides information about hyperhidrosis, the effects it can have and some of the treatment options available.

What is hyperhidrosis?
Hyperhidrosis is a common condition in which a person sweats excessively. Sweating is a natural process to control body temperature.

Hyperhidrosis is the term used for excessive sweating, which may be due to many different medical conditions including an overactive thyroid gland, the menopause and diabetes mellitus. It affects about 1% of the population.

If no underlying medical cause is identified it is called primary hyperhidrosis.

Primary hyperhidrosis usually starts in childhood or during adolescence and continues throughout life. Hyperhidrosis can affect various areas of the body.

Axillary hyperhidrosis (underarm)
Axillary hyperhidrosis results in wet patches and staining on clothes.

Plantar hyperhidrosis (foot)
Plantar hyperhidrosis leads to constantly wet footwear.

Facial hyperhidrosis (face)
Facial hyperhidrosis can be associated with uncontrollable facial blushing which some people find particularly difficult to manage.

Affected individuals can flush bright red during everyday situations, such as meeting a friend. This can cause embarrassment and isolation and may significantly affect the quality of life.
Palmar hyperhidrosis (hands)
Palmar hyperhidrosis can cause problems with everyday life such as working with paper. Stressful situations can make the situation worse. Many patients notice that their hands not only feel moist but also cold.

Treatments
Treatments include surgical and non-surgical options but may not be suitable for all areas of hyperhidrosis.

Non-surgical treatments
Self-help measures may be useful, for example:

- Reduce stress or anxiety
- Avoid food which may trigger sweating
- Wear cool clothing

Prescribed antiperspirant
Locally applied topical antiperspirants can be used for underarm, hand and foot excessive sweating.

It is recommended by the manufacturer that the prescribed antiperspirant is applied to the affected area 2 to 3 nights a week. This is when the skin is generally drier.

The product is then washed off in the morning. These preparations may be irritating to the skin.

Iontophoresis
This involves immersing the hands or feet in tap water whilst a low intensity electrical current is passed. Used initially several times a week the interval between treatments is gradually increased.

Most patients notice a complete absence of sweating in the treated areas after about four 20 minute treatments. The effects can last from 2 weeks to 3 months before another course of treatment is recommended. Iontophoresis is not suitable if you are pregnant or if you have any metal implants/pacemaker.
Botulinum toxin A injections
Used mainly for underarm sweating botulinum toxin works by blocking the nerve impulses to sweat glands.
A series of injections are given just under the skin in the hairy part of the armpit. The treatment can take up to 1 week to work and the effects can last anything from 4 to 12 months.
Further injections can be given when symptoms return. This treatment can be painful. There is no information available on long term complications or on how many times the treatment may be safely repeated.
Common side effects include an increase in sweating in other areas, hot flushes, and injection site reactions.
Uncommon reactions include weakness of the arms, pain in the joints or muscles of the arms and itching which may be associated with a rash. Patients with diseases affecting the muscles are not suitable for this procedure. There have been reports of serious allergic (anaphylactic) reaction from botulinum toxin.

Anticholinergic drugs
This type of medication has many unpleasant side effects including dry mouth, blurred vision and difficulty passing urine.

Topical glycopyrrolate
Glycopyrrolate is a water based cream.

Surgical treatments
Transthoracic Endoscopic Sympathectomy (TES)
Please note: This surgery is not offered at Gloucestershire Hospitals NHS Foundation Trust
This surgery can be performed through 1 to 2 small incisions in each side of the chest. The surgery works by interrupting the nerves that carry the signals to the sweat glands.
TES is most effective for excessive hand and facial sweating with results of between 75% and 97% reduction in symptoms.
TES can also be an effective treatment for facial blushing. The effects of the surgery cannot be reversed, however symptoms can return in some patients.

**Risks**

Serious complications can occur following TES surgery. Please read this section very carefully and ask about anything if you are not sure.

- Sweating in other areas in up to 75 in 100 patients who have had TES surgery. This can be severe in 1 in 100 cases
- In 1 in 20 cases the treatment does not work
- Post-operative chest pain during the first few days
- Collapsed lung (pneumothorax)
- Horner's syndrome (constricted pupil and droopy eyelid) in 1 in 100 cases
- A small number of patients have severe nerve pain around the wound area or the torso. This is called intercostal neuralgia and usually subsides over a few weeks
- Wound infection
- Bleeding post operatively. This may require a return to the operating theatre, and in the worst case major chest surgery
- Dry hands. This can be helped by the application of hand creams
- Death (very rare)

**Alternative therapies**

Hypnotherapy, hypnosis and homeopathy are among the many alternative therapies which have been reported to have been used for the treatment of hyperhidrosis. There is no evidence available at this time to support or disprove the effect of these treatments.

**Further information**

NHS (Hyperhidrosis)
Website: [www.nhs.uk/conditions/hyperhidrosis/pages/introduction.aspx](http://www.nhs.uk/conditions/hyperhidrosis/pages/introduction.aspx)