
Cervical or lumbar sympathectomy for hyperhidrosis

What is hyperhidrosis and what causes it?

Hyperhidrosis is the medical term for excessive sweating. Why some people sweat more than others is unknown, although some medical conditions such as an overactive thyroid gland can be the cause. Commonly, the most affected areas are the hands, armpits and feet.

How can excessive sweating be treated?

Excessive sweating can be treated by:

- Simple treatments, such as roll-on antiperspirants (eg driclor)
- A type of electrolysis (called iontophoresis)
- Medication, eg beta blockers or probanthine
- Injection of botulinum toxin
- Surgery (sympathectomy)

What is sympathectomy?

Simple or medical treatments of excessive sweating might not control the symptoms, or they might induce intolerable side effects. In these cases, sympathectomy can be useful, especially for sweaty hands. Sweating of the armpits alone might respond better to injection with botulinum toxin, or by excision (removal) of skin.

Sympathectomy is a surgical technique that aims to destroy part of the nerve supply to the sweat glands in the skin. These are supplied by specialised types of nerve called the sympathetic nervous system, which controls sweating. [It is nothing to do with being 'sympathetic'].

What does sympathectomy involve?

This type of surgery can be used to control sweating of the arms and hands or feet.

For the arms and hands (cervical sympathectomy)

The sympathetic nerve supply to the arms and hands comes from inside the chest, which used to make it difficult for surgeons to reach easily. Cervical sympathectomy has become more widely used with the development of modern 'keyhole' (laparoscopic) instruments and cameras.

The patient is given a general anaesthetic. A laparoscopic camera is introduced into the chest between two ribs just below the armpit, using a small incision (cut) less than one cm long. To allow the surgeon to see the nerves clearly, the lung on that side of the chest is briefly deflated. A second laparoscopic instrument is then introduced through another small incision, and this is used to destroy the nerve using an electrical current. The lung is then re-inflated, the instruments removed, and the skin closed with dissolvable sutures. The operation takes only 20 min on average, and can easily be done as a day case. If both sides are operated on, an overnight stay is usual.

For the feet (lumbar sympathectomy)

The sympathetic nerves that supply the sweat glands of the feet are at the back of the abdomen (tummy).

This is a more involved operation than the cervical sympathectomy. It is usually done as an 'open operation', involving small incisions in the side of the abdomen (similar to the incisions made for removal of the appendix). Both sides can be done during the same operation. Most patients stay in hospital overnight after this procedure and a full recovery can take two to four weeks.

What are the complications (risks) of cervical sympathectomy?

During the operation, there is a rare risk (less than 1%) of failure of the lung to re-expand, which would need a chest drain to be placed in the short term. The commonest change after the operation is some extra sweating on the front, back or thighs (called compensatory sweating). In 10% of cases this can be severe enough to be a problem for the patient. Sweating on the face after eating spicy food can also occur but is less common (1-2%). The hands can also become too dry, and require moisturiser to make them comfortable. The eyelid on the same side as the treated hand might droop slightly (called Horner's syndrome). This occurs temporarily in 1% of cases but is permanent in only 0.1%. It is rare for the

operation to be unsuccessful to treat hand sweating but it is less reliable for armpit sweating.

What are the complications (risks) of lumbar sympathectomy?

Compensatory sweating can also occur after this procedure. In men, fertility can be affected after a bilateral procedure (on both sides).

Referrals

These operations are highly advanced and discussion about them (including risks and benefits) should always be between the patient and a specialist surgeon. Referrals can only be accepted from general practitioners or other specialists.