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## Endoscopic thoracic sympathectomy

Endoscopic thoracic sympathectomy (ETS) is surgery to treat sweating that is much heavier than normal. This condition is called hyperhidrosis. Usually the surgery is used to treat sweating of the palms or face. The sympathetic nerves regulate sweating. The surgery cuts these nerves to the part of the body that sweats too much.

### Description

You will receive general anesthesia before surgery. This will make you asleep and pain-free.

The surgery is usually done the following way:

- The surgeon makes 2 or 3 small cuts (incisions) under one arm on the side where the excessive sweating occurs.
- Your lung on this side is deflated (collapsed) so that air does not move in and out of it during surgery. This gives the surgeon more room to work.
- A small camera called a thoracoscope is inserted through one of the cuts into your chest. Video from the camera shows on a monitor in the operating room. The surgeon views the monitor while doing the surgery.
- Other small tools are inserted through the other cuts.
- Using these tools, the surgeon finds the nerves that regulate sweating in the problem area. These are cut, clipped, or destroyed.
- Your lung on this side is inflated.
- The cuts are closed with stitches (sutures).
- A small drainage tube may be left in your chest for a day or so.

After doing this procedure on one side of your body, the surgeon may do the same on the other side. The surgery takes about 1 to 3 hours.

### Why the Procedure is Performed

This surgery is usually done in people whose palms sweat much more heavily than normal. It may also be used to treat extreme sweating and blushing of the face. It is only used when other treatments to reduce sweating have not worked.

### Risks

Risks of anesthesia and surgery in general are:

- Allergic reactions to medicines
- Breathing problems
- Bleeding, blood clots, or infection
- Nausea and vomiting

Risks for this procedure are:

- Blood collection in the chest (hemothorax)
- Air collection in the chest (pneumothorax)
- Damage to arteries or nerves
- Horner syndrome (decreased facial sweating and drooping of one or both eyelids)
- Increased or new sweating
- Increased sweating in other areas of the body (compensatory sweating), especially in the trunk of the body
- Slowing of the heartbeat
- Pneumonia

## Before the Procedure

Tell your surgeon or nurse if:

- You are or could be pregnant
- You are taking any medicines, including medicines, drugs, supplements, or herbs you bought without a prescription.

Planning for your surgery:

- If you have diabetes, heart disease, or other medical conditions, your surgeon may ask you to see the health care provider who treats you for these conditions.
- If you smoke, it's important to cut back or quit. Smoking can slow healing and increase the risk for blood clots. Ask your provider for help quitting smoking.
- If needed, prepare your home to make it easier to recover after surgery.
- Ask your surgeon if you need to arrange to have someone drive you home after your surgery

During the week before your surgery:

- You may be asked to temporarily stop taking medicines that keep your blood from clotting. These medicines are called blood thinners. This includes over-the-counter medicines and supplements such as aspirin, ibuprofen (Advil, Motrin), naproxen (Aleve, Naprosyn), and vitamin E. Many prescription medicines are also blood thinners.
- Ask your surgeon which medicines you should still take on the day of surgery.
- Let your surgeon know about any illness you may have before your surgery. This includes COVID-19, cold, flu, fever, herpes breakout, or other illness. If you do get sick, your surgery may need to be postponed.

On the day of your surgery:

- Follow instructions about when to stop eating and drinking.

- Take the medicines your surgeon told you to take with a small sip of water.
- Arrive at the hospital on time.

## After the Procedure

Most people stay in the hospital one night and go home the next day. You may have pain for a week or two. Take pain medicine as your surgeon recommended. You may need acetaminophen (Tylenol) or prescription pain medicine. Do not drive if you are taking narcotic pain medicine.

Follow the surgeon's instructions about taking care of the incisions, including:

- Keep the incision areas clean, dry, and covered with dressings (bandages). If your incision is covered with skin adhesive such as Dermabond (liquid bandage) you may not need any dressings.
- Wash the areas and change the dressings as instructed.
- Ask your surgeon when you can shower or bathe.

Slowly resume your regular activities as you are able.

Keep follow-up visits with the surgeon. At these visits, the surgeon will check the incisions and see if the surgery was successful.

## Outlook (Prognosis)

This surgery may improve the quality of life for most people. It does not work as well for people who have very heavy armpit sweating. Some people notice sweating in new places on the body, but this may go away on its own.

## Alternative Names

Sympathectomy - endoscopic thoracic; ETC; Hyperhidrosis - endoscopic thoracic sympathectomy

## References

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