

Risks of Surgery

There are risks involved in every surgery. Basic risks that are common to all surgeries are bleeding, infection, blood clots, and allergic reaction to anesthesia. Due to instruments being placed between the ribs for this surgery, there is a risk of damage to the nerve or artery that run along the rib. Older patients that undergo general anesthesia are at risk for heart problems, stroke, breathing failure, kidney failure, or death. Overall, the risk of a complication is less than 1%.

Side Effects of Surgery

The most common side effect of surgery is compensatory sweating. Sweating is one form of regulating the body's heat. The surgery prevents sweating on the hands, arms, and upper chest. It is possible for the body to sweat excessively somewhere else to "compensate" for areas that now cannot sweat. The most common areas for this to occur are the face, abdomen, back, buttocks, thighs or feet. (Only about 5-10% of the time is this a problem).

The second possible side effect is gustatory sweating. This is increased sweating when eating. This is rarely severe and only occurs in 3-5% of patients.

The third side effect, Horner's syndrome, happens in about 1% of patients. This occurs when the highest sympathetic nerve is damaged during surgery. It is associated with a slight droop in the eyelid, lack of sweating on that side of the face, and a small pupil. This syndrome sometimes gets better over a period of weeks to months, but may also be permanent.

Success Rate for Surgery

Sympathectomy cures about 95-98% of palmar hyperhidrosis (sweaty palms). It cures about 75-80% of axillary (armpit) hyperhidrosis and about 25% of patients with plantar (feet) hyperhidrosis will notice some improvement.



Post-operative surgical incisions.

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HEALTHCARE ✂

MINIMALLY-INVASIVE HYPERHYDROSIS SURGERY

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What is hyperhidrosis?

Hyperhidrosis is a disorder of the eccrine (sweat) glands that is characterized by excessive sweating. This disorder occurs in about 1-2% of the population. The hands, armpits, and feet are primarily affected. Nobody understands the exact cause of this disorder, but sweating is controlled by the sympathetic nervous system.

The sympathetic nervous system is part of the nervous system that controls bodily functions like the heart beating, breathing, regulation of body temperature and sweating. These are things that the human body does not consciously control.

Hyperhidrosis is associated with hyperthyroidism (thyroid gland disorder), obesity, anxiety disorders and menopause. It can also be brought on by emotions, exercise or can occur spontaneously. Many people with hyperhidrosis experience significant social embarrassment especially when they have to shake hands with others.

Conservative Treatment

- Topical creams or astringents tend to dry up the sweat. They have to be applied repeatedly and can be messy.
- Oral medications, usually anticholinergics are sometimes used. Sedatives are used for those with anxiety-induced hyperhidrosis. Medications usually have undesirable side-effects and only work for a short period.
- Iontophoresis – which is electrical stimulation that tends to “stun” the

sweat glands. This works for 6 hours to 1 week and has limited success.

- Botox injections into the affected areas. This requires several injections and is effective for 1 to 6 months.



Surgery

Surgical excision of the sweat glands may be effective for axillary hyperhidrosis (hyperhidrosis of the armpits).

Sympathectomy is the only effective long-term treatment for most patients. Dr. Cohen has been performing endoscopic thoracic sympathectomy for 8 years and averages about 1 case per month.

Patients check into the Surgery Center the morning of their surgery. Once in the General Operating Room, the patient will be given general anesthesia. A special breathing tube that allows independent ventilation of each lung will be inserted into the airway. Two small incisions (approximately ½ cm) will be made in the armpit. A fiberoptic camera is inserted into one of the incisions and the lung on that side is allowed to deflate. All the breathing is done by

the opposite lung. The camera is then hooked up to 2 video monitors so that the entire surgery team can see the anatomy of the nerves clearly. Long, skinny instruments are then used in the other port to identify the sympathetic nerve responsible for sweating. Then a clip is placed around the nerve above the second sympathetic ganglia and another clip below the third sympathetic ganglia. Then the nerve is cut out between the clips. The lung is then re-inflated, all the air is suctioned out of the chest and the incisions are closed. The surgery is then repeated through the other armpit.

After the surgery is complete, the breathing tube is removed; the patient wakes up and is transported to the Recovery Room. After a short stay in the recovery room, the patient is then transported back to the Same Day Surgery Suite. Most patients go home the afternoon of surgery needing only mild pain medication. Dr. Cohen and his team check on each patient to determine if they are ready to go home. Activity is not restricted after surgery and most people return to work the next day.

