Sympathectomy, ETS
Endoscopic Thoracic Sympathectomy

This is a procedure to help control *hyperhidrosis* (profuse sweating) and blushing. Hyperhidrosis is a condition that causes abnormal excessive sweating of the:

- Hands.
- Armpits
- Face.
- Scalp.

In some people this is a source of embarrassment that affects their quality of life. Another condition, *erythrophobia* (increased facial blushing and flushing of the neck and chest) is a condition in which individuals become bright red in response to mildly embarrassing situations. If these problems cause a person to become socially isolated, a sympathectomy is a surgery which may help. Other conditions helped with sympathectomy include Raynaud's disease and Reflex Sympathetic Dystrophy; however, sweating of the palms is the most common condition treated. Sympathectomy is done on the sympathetic chain between the first and fifth ribs.

Endoscopic thoracic sympathectomy (ETS) is a surgical procedure in which a thoracic endoscope is used to destroy portions of the sympathetic nerve chain in the chest. This can be done with:

- Burning with an electrical current (*cauterization*).
- Cutting the nerves.
- Removing a portion of the nerve.
- Clamping the nerves with a titanium clip.

If you have had blood-clotting problems or previous thoracic surgery, you may not be a good candidate for video-assisted thoracic surgery (VATS). VATS requires the collapse of one lung. This means you need good breathing capabilities so you will get enough oxygen (air) during the procedure. Video-assisted thoracic surgery (VATS) is a minimally invasive surgical technique. This means your chest is operated on through a few small *incisions* (cuts) rather than a large incision in an open procedure. Generally this means less recovery time and less discomfort following the procedure. The thoracic endoscope (thoracoscope) allows your surgeon to look inside your chest. During the procedure, the surgeon views the inside of your chest on a video monitor. The thoracoscope may be extracted and put in through a different incision site (port) as needed. When the procedure is done, the lung is expanded. A chest tube is left in after the procedure and removed the next day or after a few days.

Sympathectomy will not work for everyone and your surgeon will decide if this is a good procedure for you based on your individual situation. Exact results of ETS cannot be predicted. There is too much variation in sympathetic nerve function from one person to the next. There are also variations in surgical technique.

RISKS

There are few risks involved with thoracoscopic surgery. **Some of these include:**

- Bleeding.
- Infection.
- *Pneumothorax* (lung collapse).
- Compensatory sweating. This is sweating that happens in other areas following this surgery and is in areas which were not affected before the surgery.
- Horner's Syndrome is a condition caused by damage to a part of the nerve chain. Every attempt is made to avoid this complication. It results in decreased facial sweating, eyelid drooping, and enlarged pupil on one side. This complication is more likely to occur when the sympathectomy is done higher up on the sympathetic nerve chain and is more common when treating facial blushing.
- Because healthy nerve tissue of the sympathetic nervous system is destroyed, normal brain messages to many different organs, glands and muscles are no longer received. Because of this, the brain cannot make adjustments for changing conditions in our:

- Surroundings.
- Changing emotional states.
- Levels of exercise.

ETS may change many things. It may affect your:

- Sweating.
- Heart rate.
- Heart stroke volume.
- Blood pressure.
- Thyroid.
- Lung volume.
- Goose bumps.
- How your pupils get larger and smaller.
- Also your skin temperature.
- Anything controlled by your autonomic nervous system can be affected.

It may lessen your physical reaction to exercise and/or strong emotion. The latter is why it has been considered for psychiatric purposes. Rarely, sexual function and/or digestion may be changed as well.

Make sure that you are well informed before having this surgery and that you are aware of all the possible side effects and possible complications.

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