

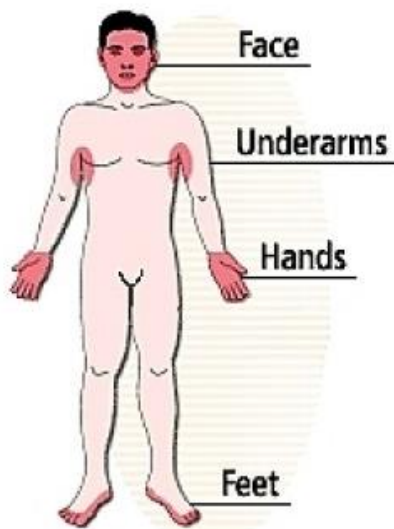
HYPERHIDROSIS

Also known as *Sweating - excessive*; *Perspiration - excessive*; *Diaphoresis*;

Hyperhidrosis is a relatively common condition in which a person **sweats excessively**.



The sweating may affect the whole of your body, or it may only affect certain areas. Commonly affected areas include the: armpits, palms of your hands, soles of your feet, groin, face and chest.



Both sides of the body are usually affected equally – for example, both feet and both hands.

The sweating doesn't usually pose a serious threat to your health, but it can be embarrassing and distressing. It can also have a negative impact on your quality of life and may lead to feelings of depression and anxiety.

What is excessive sweating?

There are no guidelines to determine what "normal" sweating is, but if you feel you sweat too much and your sweating has started to interfere with your everyday daily life, you may have hyperhidrosis.

For example, you may have hyperhidrosis if:

- you avoid physical contact, such as shaking hands, because you feel self-conscious about your sweating
- you don't take part in activities, such as dancing or exercise, for fear they will make your sweating worse
- excessive sweating is interfering with your job – for example, you have difficulty holding tools or using a computer keyboard or even driving
- you're spending a significant amount of time coping with sweating – for example, frequently showering and changing your clothes
- you become socially withdrawn and self-conscious



Hyperhidrosis can develop at any age, although primary hyperhidrosis typically starts during childhood or soon after puberty.

Causes of hyperhidrosis.

Excessive or extreme sweating can occur without triggers or other cause. This is called ***primary hyperhidrosis***.

- The cause appears to be overactive sweat glands.
- It seems to run in families and often begins in childhood or adolescence.
- It most often involves the hands, feet, underarms, and face.

Secondary hyperhidrosis. Increased sweating may also be the result of another medical condition. Common conditions include:

- Anxiety
- Brain and nerve disorders, such as stroke, spinal cord injury, nerve injury, head trauma, and Parkinson disease
- Certain cancers
- Chronic alcohol abuse (sweating is mostly on the palms or soles)
- Diabetes and Heart disease
- Overactive thyroid
- Medicines used to treat Alzheimer disease, depression, and pain
- Menopause
- Obesity

Personality problems or phobias do not seem to be a cause of excessive sweating. These conditions have to be excluded before a diagnosis of Primary/ Idiopathic hyperhidrosis is made.

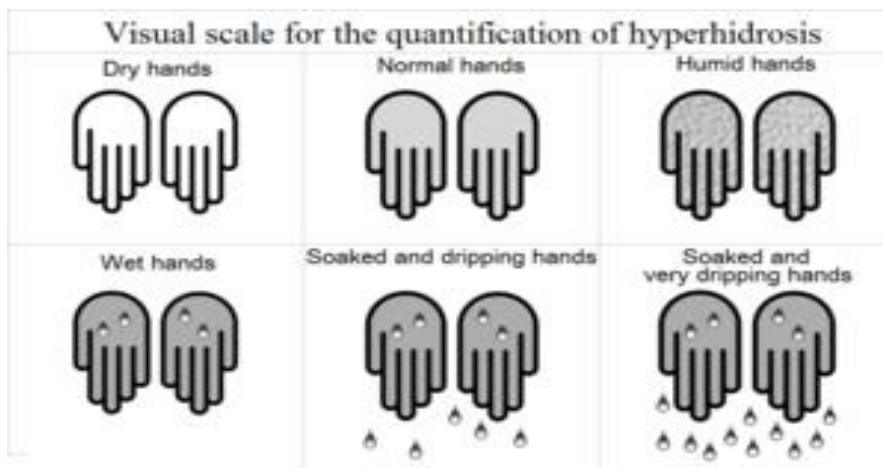
Symptoms

Most people with primary hyperhidrosis sweat from only one or two areas of the body:

- The palms, feet, underarms, or head are the most common areas. Sweating will be on both sides of the body at the same time. The rest of the body remains dry.
- Sweating is absent during sleep. It occurs at least once a week or more often.
- Sweating occurs even when you are not exerting yourself.

The main symptom of hyperhidrosis is *wetness*. Sweating can be so heavy that:

- It is hard to use a keyboard or turn a door knob and may soak through clothes.
- Skin problems such as infection and skin breakdown may also result from the extreme sweating.



Sweating caused by other medical problems:

- Tends to involve the entire body
- Often occurs during sleep as well as at other times
- Night sweat should be checked out as they could be an indication of an underlying condition such as Tuberculosis.

Exams and Tests

- **Physical examination:** Visible signs of sweating may be noted during a doctor's visit.
- **Patients History.**

Tests may also be used to diagnose excessive sweating, including:

- **Sweat test:** An iodine solution is applied to the sweaty area. After it dries, starch is sprinkled on the area. The starch-iodine combination turns a dark blue color wherever there is excess sweat.
- **Paper test:** Special paper is placed on the affected area to absorb the sweat. Then it is weighed. The heavier it weighs the more sweat the paper has absorbed.

Managing hyperhidrosis

Self-care

It may help to avoid certain triggers, such as: Alcohol, Caffeine, Hot sauce or spices, such as curry or cumin.

Antiperspirants: Excessive sweating may be controlled with strong anti-perspirants, which plug the sweat ducts. Antiperspirants can also be used on your feet. Sprays may work better on your feet.

- **Antiperspirants are not the same as deodorants.** Deodorants do not prevent sweating, but they help to reduce body odor.

Wear sandals if you can. When you wear shoes:

- Choose shoes that allow air to circulate, such as those made from leather or other natural materials.
- Allow your shoes to dry before wearing them again. Try not to wear the same pair of shoes two days in a row.

Choose socks that draw (or wick) moisture away from the skin. Cotton socks do not do this. Often, the packaging will say whether socks wick moisture away skin. Wash and dry your socks before wearing them again.

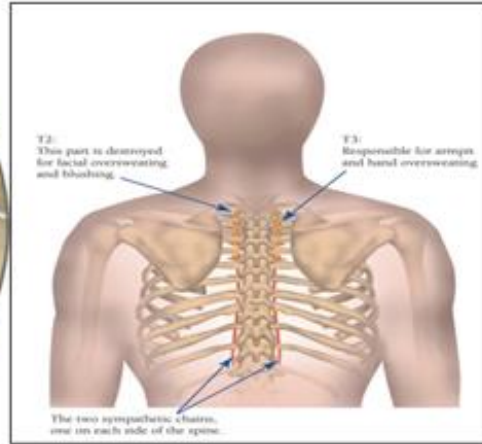
TREATMENT

Because most patients are usually reluctant to be treated surgically, most of them are pre-treated by different conservative methods. The application of astringents, powders, antibiotics or anti-cholinergics is usually unsuccessful and followed by side-effects, which are not tolerated by the patients. Surgical alternatives such as axillary resection of the sweat glands or a subcutaneous curettage are very invasive with high complication rates.

Endoscopic thoracic Sympathectomy (ETS): This is a procedure that is recommended for severe cases when other treatments do not work:

- During the procedure, a nerve is cut, turning off the signal that tells the body to sweat excessively. It is most often done on people whose palms sweat too much. It may also be used to treat extreme sweating of the **face, neck, axilla** and the **trunk**.
- Complications include transient Horner's syndrome occurring in 2-5% of the cases.

- Side effects that may occur with this procedure include compensatory perspiration or gustatory sweating after the consumption of certain foods in some patients. This impairment is however clearly less than the primary perspiration. The incidence of these side effects is however reduced by the selective technique of ETS. The tendency to sweat can persist postoperatively for a further 3-5 days by the activity of the neurotransmitters.



Results of ETS.

The success rate for Sympathectomy of the hands is between 85-95%

The treatment for hyperhidrosis of the axilla is successful in 60-80% and for the body in 50-60%. There is limited experience of hyperhidrosis of the face as of now.

Underarm surgery: This is surgery to remove the sweat glands in the armpits. Methods used include laser, curettage (scraping), excision (cutting), or liposuction. These procedures are done using local anesthesia.

Medication: Certain medicines may prevent excessive sweating: These are prescribed for certain types of hyperhidrosis, such as excessive sweating of the face.

Iontophoresis: This is a simple office procedure that uses electricity to temporarily turn off the sweat gland. It works best for sweating of the hands and feet.



Botox: Botulinum toxin type A (Botox) is used to treat severe underarm sweating.

- Injections are used for the underarms, feet, hands, or face and head. They temporarily block the nerves that stimulate sweating.

