

Hyperhidrosis

Botulinum toxin injections can effectively treat localized hyperhidrosis by blocking the smooth muscle activity of the sweat glands.

About

- **Hyperhidrosis** is the excessive production of sweat.
- The production and excretion of sweat are mediated by the sympathetic nervous system and regulated by a gland in our brain called hypothalamus.
- Sweating plays an important role in the regulation of body temperature.
- Sweat glands produce an odourless liquid which, when decomposed by the action of bacteria, acquires a characteristic, unpleasant smell.
- Hyperhidrosis can either be generalized or localized to specific parts of the body. Hands, feet, axillae (i.e. armpits), face, and the groin area are among the most active regions of perspiration due to the relatively high concentration of sweat glands; however, any part of the body may be affected.
- Primary hyperhidrosis usually starts around puberty and peaks in adulthood. Studies show that there is a genetic component predisposing to the condition. Primary hyperhidrosis is estimated at around 1% of the population, afflicting men and women equally.
- Primary hyperhidrosis is caused by an exaggerated response to increased body temperature (hot weather, exercise, fever) or emotion.

- Secondary hyperhidrosis may be secondary to a variety of medical conditions such as thyroid problems, hormone imbalance, diabetes, obesity, certain drugs, etc.
- *Botulinum toxin injections* can effectively treat localized hyperhidrosis by blocking the smooth muscle activity of the sweat glands. Results can last up to nine months.

For more information on the use of muscle relaxing injections in the treatment of hyperhidrosis please download **Dr Sotirios Foutsizoglou's** relevant article.

Indications

Hyperhidrosis is a distressing condition and sufferers have usually tried a variety of modalities including *antiperspirants, deodorants, iontophoresis, antimuscarinic topical agents* (e.g. Glycopyrrolate cream), oral medication such as *oxybutynin* or *beta-blockers*.

Those with severe hyperhidrosis may resort to surgical procedures such as *endoscopic thoracic sympathectomy (ETS)* to alleviate symptoms.

Affected people are constantly aware of their condition and try to modify their lifestyle to accommodate this problem. This can be disabling in professional, academic and social life, causing embarrassments. Many routine tasks become impossible chores, which can have devastating emotional effects on one's individual life.

Excessive sweating of the hands interferes with many routine activities, such as securely grasping objects. Some hyperhidrosis sufferers avoid situations where they will come into physical contact with others, such as greeting a person with a handshake.

I have come across people who have given up their studies as they could not write on a piece of paper without soaking it with sweat or musicians who had to change career as using their musical instruments became 'mission impossible'

Hiding embarrassing sweat spots under the armpits limits the sufferers' arm movements and pose. In severe cases, shirts must be changed several times during the day.

Excessive sweating of the feet makes it harder for patients to wear slide-on or open-toe shoes, as the feet slide around in the shoe because of sweat.

Hyperhidrosis can also affect the face, neck and scalp and it tends to affect men more than women occurring later on in life. The area most commonly affected in facial hyperhidrosis is the upper band of the forehead where studies suggest that the density of sweat glands is greater, followed by upper lip and cheek. The scalp may also be affected. These areas can also be effectively treated with botulinum toxin injections.

Botulinum toxin is a safe and effective treatment of excessive sweating for all people who think that their perspiration interferes with their quality of life.

Contra-indications

Patients suffering with myasthenia or amyotrophic lateral sclerosis, as well as patients taking certain antibiotics (e.g. aminoglycosides), and pregnant or breastfeeding women should not undertake treatments involving botulinum toxin injections.

Treatment Explained

Axillary hyperhidrosis

Patients are advised to shave their armpit 2 -3 days prior to the procedure.

On the day of the procedure your doctor identifies the worst affected area by performing an iodine test. An iodine solution followed by a starch solution will be applied under the armpit. The sweating areas take a blue colour which will guide the doctor's injection points.

A tiny amount of **muscle relaxing toxin** is injected in a grid like pattern over the affected area. The injections cause minimal discomfort as they are conducted on a superficial level with an extremely fine needle. However sensitive patients can benefit from a topical anaesthesia.

The effect starts being felt two days after the injections, the action of the treatment gradually increases and reaches peak efficacy after one month.

The duration of action varies according to the patient, the toxin's concentration and the total injected dose. Results can last up to nine months.

Other areas treated by our highly skilled doctors include:

- **Palmar Hyperhidrosis**
- **Foot Hyperhidrosis**
- **Facial Hyperhidrosis**
- **Scalp and Neck Hyperhidrosis**
- **Frey's syndrome** (= refractory localized hyperhidrosis occurring after parotid surgery)

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Reference

Haider, A; Solish N (January 2005). "Focal hyperhidrosis: diagnosis and management". Canadian Medical Association Journal 172 (1): 69-75.