

# HYPERHIDROSIS

## WHAT IT IS

It is a condition when one **excessively sweats** beyond what is physically required often resulting in social, emotional, work impairment. Epidemiologic studies have found that the condition affects about **1%** of Singapore's population. It is made worse due to our hot and humid climate.

## WHAT TYPES ARE THERE?

### Primary Hyperhidrosis

The **majority** of those with hyperhidrosis fall into this category. It is currently unknown what the exact cause of Primary Hyperhidrosis is but it mostly affects the **hands, face, underarms and the sole of one's feet** (Places where sweat glands are concentrated in)

### Secondary Hyperhidrosis

Only affects one particular site of the body and is caused by an underlying **medical condition** (Diabetes Mellitus, Menopause, Acute respiratory failure) or **medication use** (Antidepressants, Hypoglycemics, Cholinergic agonists).



## HDSS

**Hyperhidrosis Disease Severity Scale (HDSS)** is a single question survey with **4 grades** of tolerability of sweating and impact on quality of life which is used to measure the severity of the disease. It can also be used to estimate the response to treatment, thus, successful treatment leads to a drop in the HDSS score. It is scored as such:

- |  |   |
|--|---|
| <p><b>01</b> <b>Normal body condition</b><br/>Sweating that is not noticeable and does not interfere with daily activities</p> | <p><b>03</b> <b>Moderate hyperhidrosis</b><br/>Sweating that is barely tolerable and often interferes with daily activities</p> |
| <p><b>02</b> <b>Mild hyperhidrosis</b><br/>Sweating that is tolerable but sometimes interferes with daily activities</p>       | <p><b>04</b> <b>Severe hyperhidrosis</b><br/>Intolerable sweating that always interferes with daily activities</p>              |

## TREATMENT

Axillary (Underarm)	<p><b>Mild (HDSS = 2)</b> Step 1: Topical 20% aluminium chloride (Drysol) is applied to affected areas Step 2: Botox injections</p> <p><b>Moderate/Severe (HDSS = 3 or 4)</b> Step 1: Drysol or botox injections Step 2: Consider doing both aluminium chloride and botox injections in combination</p> <p><b>All severities</b> Step 3: Consider microwave therapy in which microwave energy destroys the sweat glands Step 4: Local surgery like liposuction, curettage (removal of axillary sweat glands, skin excision) Step 5: (last resort): Sympathetic denervation (i.e., endoscopic thoracic sympathectomy, ETC) in which a portion of the sympathetic nerve (nerve that causes sweating) trunk in the thoracic region is destroyed</p>
Carnofacial (Face)	<p>Step 1: Drysol or topical 2% glycopyrrolate Step 2: Consider onabotulinumtoxinA (botox) injection Step 3 (last resort): Sympathetic denervation (ETC)</p>
Palmar (Hand) & Plantar (Sole of foot)	<p><b>Mild (HDSS = 2)</b> Step 1: Drysol is applied to affected areas Step 2: If topical treatment fails, consider Botox injections or iontophoresis (transdermal drug delivery by use of an electric field on the skin)</p> <p><b>Moderate/Severe (HDSS = 3 or 4)</b> Step 1: Drysol plus Botox injection or iontophoresis; all three are considered first-line treatment</p> <p><b>All severities</b> Step 2:(last resort for Palmar <b>ONLY</b>): Sympathetic denervation (ETC)</p>