

Resolving Hyperhidrosis Using ImmunoGenomics and Eliminating IgG and IgE Food Allergies



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Definition of Hyperhidrosis



- Production of perspiration is beyond what is necessary and needed to cool the body
- Clinical signs:
 - Face, armpits, feet, hands, scalp, groin, and back remain damp and wet through out the day and night
 - Severity and frequency varies by the hour, day, week, month or year.
 - Dominates a person's life

Types of Hyperhidrosis



- **Focal:** limited to feet, hands, armpits or face
- **Generalized:** whole body
 - May be secondary to diabetes, infection, overactive sweat gland or hormonal therapy for prostatic cancer

Incidence and Cause of Hyperhidrosis



- 0.5 to 1 % of the population
- Genetic predisposition: 1/3 to 1/2 of people with hyperhidrosis have a relative with a similar problem
- Gene identified for excessive hand sweating
- Long-term and life-time condition without the hope of spontaneous remission

Triggers for Hyperhidrosis



- Anxiety
- Emotional Stress
- Spicy foods
- High ambient temperatures

Treatments for Hyperhidrosis



- Antiperspirants
- Iontophoresis
- Drugs
- Botulinum Toxin
- Surgery
- Integrative Medicine

Antiperspirants



- **First Therapeutic Treatment**
 - Aluminum chloride (20 to 25 %) in 70 to 90 % alcohol
 - Apply 2 to 3 times per week
 - Appropriate for light to moderate hyperhidrosis

Iontophoresis



- Low intensity electrical current (5 to 18 mA) applied to the palms and/or soles of the feet immersed in an electrolyte solution
 - Sessions last 20 minutes, two to three times per week
 - Time consuming and inefficient when armpits, trunk or face is/are involved
 - Suitable for mild to moderate hyperhidrosis

Drugs



- Psychotropic drugs used to treat the emotional symptoms (anxiety, frustration, embarrassment)
- Anticholinergic drugs have been studied by rarely used because of side effects prior to any noticeable change in condition

Clostridium Botulinum



- Toxin interferes with the acetylcholine at neural synapses, leading to a paralysis of all muscles in the body including the respiratory muscles
- Small doses injected subcutaneously around the face, eyes, lips impairs neural signaling to muscles giving the appearance of a face lift
- Botox injections are effective for 6 to 12 months when hyperhidrosis is limited to armpits

Surgery



- When hyperhidrosis is limited to armpits, sweat glands can be excised.
- When hyperhidrosis is more global, then severing the sympathetic nerves can abolish excessive sweating of the scalp, face, hands and armpits (endothoracic sympathectomy)
- Lumbar sympathectomy affects the feet primarily.

Complications Associated with Surgery



- **Compensatory sweating: 50 % of people who have either thoracoscopic or endothoracic sympthatectomy.**
- **Dropping eyelids (Hornners syndrome)**

Integrative Medicine



- **Massage**
- **Hypnosis**
- **Psychotherapy**
- **Botanicals**

Case History



- 65 year old woman living in Chicago, IL
- Dx: hyperhidrosis at age 62.
 - Frequency and severity intense
 - Two to four episodes per day lasting between 30 minutes to hours
- Tx: Estrogen Therapy and Xanax
 - Surgery to excise sweat glands in the back

GENESIS Matrix



- **Genetics**
- **Environment**
- **Nutrition**
- **Emotions**
- **Stress**
- **Inflammation**
- **Spirituality**



**Comprehensive
Health
Questionnaire**

CHQ Summary



- **Genetics:** No hyperhidrosis in family
- **Environment:** No exposure to toxic chemicals
- **Nutrition:** Traditional American Diet
- **Emotions:** Frustration, Anger, Anxiety, Hopeless, Helpless, Shame
- **Stress:** High
- **Inflammation:** GIT and GERD
- **Spirituality:** Belief in God

Diagnostic Tests Ordered



- **IgE Food Antibody Assessment**
- **Immuno, Detox and Osteo Genomic Profiles**
- **Intestinal Permeability**
- **Comprehensive Digestive Stool Analysis**
- **Blood Type**

Blood Type Diet



- Px : Blood Type B
- Avoid Wheat and Dairy
- 80:20 Rule

Results of IgE Food Antibody Assessment



GRAINS

NUTS

Rice	High
Buckwheat	Moderate
Corn	Moderate
Wheat	Moderate
Oat	Low
Soybean	Low

Almond	High
Peanut	Moderate
Hazelnut	Low

Total IgE : 217 3x reference range

Results of IgG Food Antibody Assessment



- Low Antibody Titters
 - Grapes
 - Papaya
 - Garlic

Total IgE : 217.0 3 x reference range

ImmunoGenomic Results



- **Single Nucleotide Polymorphism (SNP)**
 - IL-1B: associated with more chronic inflammatory conditions that involve COX2 and PG1 and PG3.
 - IL-4: associated with higher levels of IgE leading to increased permeability of gut epithelium
 - IL-6: increases pro-inflammatory response
 - IL-10: no longer inhibits pro-inflammatory ILs
 - IL-13: promotes more IgE synthesis, leads to inflammatory states

DetoxGenomic Results



- **Phase I**
 - CYP1A1
 - CYP1B1
- **Phase II**
 - Nat2 (Both slow and fast)
 - GSTM1 : Absent
 - SOD2: Heterozygous

NutriGenomics



- Multiple Vit/Min Supplement
- Ester C
- EPA/DHA
- Milk Thistle
- Selenomethionine
- N-acetyl cysteine
- Curcumin
- Ashwaganda

Conclusions



- Changes in diet (Blood Type Diet) can reverse and alleviate hyperhidrosis in some people
- ImmunoGenomic data can identify the underlying mechanism and the appropriate nutrients to turn down the “volume” of pro-inflammatory molecules (Nutrigenomics)
- DetoxGenomic results helps the clinician understand how the detoxification process can play a role in hyperhidrosis.