Primary Hyperhidrosis and Sensitive Skin Syndrome: A National Pilot Survey

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BACKGROUND:

• Sensitive skin syndrome (SSS) is a condition of subjective cutaneous hyperreactivity to innocuous stimuli, affecting ~50% US population\(^1\).
• Primary hyperhidrosis (HH) is a disorder of excessive sweating caused by abnormal cholinergic signaling and is the most common eccrine gland disease.
• Eccrine pathology and/or cholinergic stimulation may contribute to SS flares\(^2\).

OBJECTIVES:

• Evaluate the frequency, quality, and location of SSS in an HH population.

METHODS:

• An IRB-exempt survey was disseminated by the International Hyperhidrosis Society to their membership.
• Statistical analyses were performed using GraphPad Prism.
• A predictive classification model for SSS was built using random forest machine-learning algorithms.

637/1668 (38.19%) of respondents suffered from HH.
Of these, 89% self-reported skin sensitivity.
Results: Severity of HH and SS-10 Scores

75% of respondents believe HH impacts their skin sensitivity.

More severe HH was correlated with higher SS-10 scores (p<0.0001).

Predictive modeling designated SS-10 scores as the most predictive feature of SSS in this cohort.
Results: SSS in focal HH

SSS occurred frequently in body regions both affected and unaffected by HH.
Conclusions

These data are the first to propose and support a relationship between SSS and HH.

In a survey of a large HH cohort...

- SSS occurred more frequently than the general population
- SSS occurred in areas unaffected by HH and/or sweat, suggesting sweat is not the sole causative link

Screening HH patients for SSS may be warranted

References