Prevalence of Anxiety, Depression and Attention Deficit Disorder (ADD) in Patients with Primary Hyperhidrosis

Ella N. Glaser, BLA¹
Eric S Armbrecht, Ph.D.²
Rosemary King, PA-C, MPH²
Dee Anna Glaser, MD²

¹University of Missouri-Kansas City School of Medicine ²Saint Louis University Department of Dermatology



Dr. Dee Anna Glaser is a consultant for Dermira, Inc., and an investigator for Allergan, Atacama Therapeutics, Brickell Biotech, Inc., Galderma, and Revance Therapeutics, Inc. She has received honoraria for consulting with Allergan and Dermira, Inc.

Background:

- Primary hyperhidrosis is a chronic and socially disabling disorder with a significant impact on quality of life.
- It has an estimated US prevalence of 4.8% (~15.3 million people).¹
- Few studies have attempted to estimate the prevalence of mental illness in patients with hyperhidrosis, and the results have been conflicting.²⁻⁴

References:

- 1. Doolittle et al. *Arch Dermatol Res.* 2016;308(10):743-9.
- 2. Bahar R,et al. The prevalence of anxiety and depression in patients with or without hyperhidrosis (HH). *J Am Acad Dermatol*. 2016;75:1126-1133
- 3. Braganca GM et al. Evaluation of anxiety and depression prevalence in patients with primary severe hyperhidrosis. *An Bras Dermatol.* 2014;89:230-235.
- 4. Weber A et al. Psychosocial aspects of patients with focal hyperhidrosis. Marked reduction of social phobia, anxiety and depression and increased quality of life after treatment with botulinum toxin A. *Br J Dermatol*. 2005;152:342-345

Objective:

- Estimate the prevalence of depression, anxiety and attention deficit disorder (ADD) in patient was
 primary hyperhidrosis.
- Understand the correlation between hyperhidrosis location and severity with mental health

Method:

- Patients diagnosed with primary hyperhidrosis from 2011-2018 at a single site were identified at time
 of initial evaluation.
- Age of onset, age at time of initial evaluation, gender, hyperhidrosis locations and Hyperhidrosis Disease Severity Scale (HDSS) were recorded.
- Patients were considered to have anxiety, depression, and/or ADD diagnosis if: (1 or more)
 - self reported diagnosis on intake form
 - had an ICD9 code of diagnosis
 - clinical note documenting diagnosis
 - And/or if taking ADD specific medication SAINT LOUIS

Total number of patients	500
Age:	
Mean age of onset	15
Mean age at time of evaluation	30
Sex	Number (%)
Female	356 (71.2)
Male	144 (28.8)
Number of sites involved	
1 to 3	307 (61.4)
4 to 6	124 (24.8)
7 to 9	69 (13.8)
Psychiatric Diagnosis	Prevalence (%)
Anxiety	13.8

12.4

6.4

Value

Characteristic

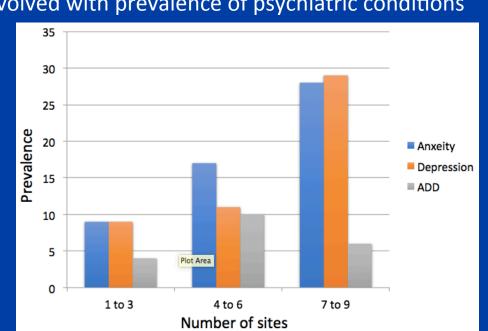
Depression

Attention Deficit

Disorder (ADD)

Results

- Positive correlations between the number of anatomical HH sites involved and the prevalence of psychiatric conditions
- No association with overall HDSS severity or location involved with prevalence of psychiatric conditions



Conclusion:

- There is a significant association between HH and the prevalence of anxiety, depression and ADD regardless of gender or age
- Compared to the nationally reported prevalence of anxiety, depression and ADD, HH patients
 have a statistically significant higher prevalence than the general public.
- The severity and/or location of HH do not correlate with prevalence of anxiety, depression and ADD.
 - However, there is a positive correlation between the number of anatomical sites involved and the prevalence of these comorbidities.
- Providers should be aware of the increased prevalence of mental health disorders in patients

