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Evaluating patients with hidradenitis suppurativa for disordered eating

Keywords: body mass index, eating disorders, hidradenitis suppurativa, multidisciplinary approach

Dear Editor,

Hidradenitis suppurativa (HS) is a chronic inflammatory skin disorder affecting women and, disproportionately, people of color.¹ Weight loss is often recommended for patients with HS due to the observed connection between disease severity and body mass index (BMI) and its potential contribution to the disease process.¹ HS is associated with a more negative body image, which increases the risk of developing eating disorders (EDs). There is increasing literature detailing HS's psychological effects, including depression, anxiety, social isolation, and body image disruption.¹ Unfortunately, EDs remain underdiagnosed and undertreated, especially among people of color and those with higher BMIs.²⁻⁴ We sought to better understand the prevalence of disordered eating in patients with HS given the common recommendation for weight loss.

Patients diagnosed with HS were recruited both in clinic and through the Mass General Brigham online portal system and provided a survey that included the Eating Attitudes Test-26 (EAT-26), along with validated questions regarding food insecurity. The EAT-26 is a validated and widely used tool for assessing ED risk in a wide range of populations, such as high schoolers, college students, athletes, and other subpopulations, with a general rate of 15 to 20% for young women.⁵ Its use as a tool is validated with a score range from 0 to 75, and those who score 20 or higher are considered high risk for an ED, although a score less than 20 cannot rule out the possibility of an ED. Patients were provided ED treatment resources during the consent process, including contact information for the National Eating Disorder Association, National Association of Anorexia Nervosa and Associated Disorders, Eating Disorders Research Center, Academy of Eating Disorders, and resources within our hospital system. The Mass General Brigham Institutional Review Board approved this study (IRB protocol: 2022P002658).

Among the 142 eligible patients recruited in clinic, 134 consented and 115 completed the survey (response rate, 80.9%; completion rate, 85.8%). Most responders were women (82.6%). Of the patients recruited in clinic, 50% was identified as White, 31.3% as African American, 4.3% as Asian, 3.6% as mixed race, and 8.7% as other (Table 1). Of the 1,103 recruited virtually, 73 completed the survey (response rate, 6.6%). In total, 188 patients completed the survey.

Overall, 17% of female patients demonstrated concern about dieting, body weight, or problematic eating behaviors, as

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indicated by a score of 20 or above on the EAT-26. Almost 20% of patients reported binge-eating episodes at least 2 to 3 times per month, and 15.6% reported using laxatives, diet pills, or diuretics for weight control. A challenge in affording nutritious meals was noted in 22.7% of participants. There was no statistically significant association between the risk of disordered eating and Hurley stage, sex, age, BMI, race, or ethnicity.

Our results demonstrate that female patients with HS of all ages have a similarly high risk of developing EDs (17%) when compared to other subpopulations of women (where rates in studies range from 11 to 25%).^{2,3} We found that some patients experience significant food access barriers.^{5–7} Importantly, our data demonstrate that EDs are not limited to any single demographic despite underrecognition of EDs, particularly in women of color.⁴

These findings highlight the need for a multidisciplinary approach to HS treatment that encourages effective communication to avoid inappropriate weight-loss recommendations. To avoid homogeneity in disease severity, any patients within our department who carried a diagnosis of HS were recruited from our patient portal system where the response rate was significantly lower when compared with patients recruited in clinic, leading to selection bias. Additional limitations stem from response bias, as some clinic patients did not complete the survey due to time constraints or lack of interest. Further research is required to better identify and address nutrition, weight management, disordered eating, and food access barriers in patients with HS.

What is known about this subject in regard to women and their families?

• Hidradenitis suppurativa (HS) is a chronic, inflammatory skin condition that predominantly affects women and people of color. Due to its perceived association with increased disease severity, weight loss is often recommended for these patients. Nationally, 11 to 20% of college-aged women develop eating disorders. Along with a more negative body image, this lifestyle recommendation can lead to an increased risk of developing eating disorders in patients with HS.

What is new from this article as messages for women and their families?

- Our study suggests that female patients with HS are at a similarly high risk of developing eating disorders as the highest-risk group in the general population.
- A multidisciplinary approach should be taken with all patients with HS that includes determining patient goals, reviewing prior eating disorder history and risk factors for food insecurity, and including nutrition and dietician counseling.

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| Table 1 | |
|---|--|
| Demographic data of patients who completed survey | |

| | Clinic patients ^a (<i>n</i> = 115) (n = 115) | Portal patients ^b ($n = 73$) ($n = 73$) |
|------------------------|---|---|
| Sex, no. (%) | | |
| Female | 95 (82.6) | 63 (86.3) |
| Male | 17 (14.7) | 8 (11.0) |
| Race, no. (%) | | |
| White | 57 (50.0) | 61 (83.6) |
| Black/African American | 36 (31.3) | 7 (9.6) |
| Asian | 5 (4.3) | 1 (1.4) |
| Mixed | 4 (3.6) | 4 (5.5) |
| Other | 10 (8.7) | 0 (0) |
| Ethnicity, no. (%) | (), | |
| Hispanic or Latino | 31 (27.0) | 11 (15.1) |
| Not Hispanic or Latino | 84 (73.0) | 62 (84.9) |
| Hurley stage, no. (%) | | |
| 1 | 13 (11.3) | 15 (20.6) |
| | 57 (49.5) | 23 (31.5) |
| Ш | 43 (37.4) | 14 (19.2) |
| Missing | 2 (1.7) | 21 (28.8) |
| Age, no. (%) | (), | |
| 18–29 | 51 (44.3) | 21 (28.8) |
| 30–39 | 36 (31.3) | 21 (28.8) |
| 40-49 | 20 (17.4) | 13 (17.8) |
| 50-59 | 5 (4.3) | 13 (17.8) |
| 60-69 | 3 (2.6) | 5 (6.8) |
| BMI, no. (%) | (), | |
| <18 | 1 (0.9) | 0 (0) |
| 18.5-24.9 | 17 (14.8) | 15 (20.6) |
| 25-29.9 | 17 (14.8) | 16 (21.9) |
| 30-34.9 | 29 (25.2) | 16 (21.9) |
| >35 | 51 (44.4) | 26 (35.6) |

BMI, body mass index.

^aClinic patients refer to verified patients with hidradenitis suppurativa approached in person after their dermatology clinic appointment. Three clinic patients did not indicate their gender information. ^bPortal patients refer to verified patients with hidradenitis suppurativa who were recruited via the Mass General Brigham online patient portal system. Two portal patients were missing their gender data.

Conflicts of interest

The authors made the following disclosures: K.N.J. has owned equity shares in Sanofi and Centene Corporation, served on the Clinical Advisory Board for Beanbag Health, and received research funding from the National Institute of Diabetes and Digestive and Kidney Diseases. A.C. serves on the advisory board for Novartis International, UCB, and Wedbush. A.Z., Y.H.L., and K.S.-S. have no conflicts of interest.

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Study approval

The author(s) confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies: Approved by the Mass General Brigham Institutional Review Board (P002658).

Author contributions

AZ: Participated in research design, writing of the paper, performance of the research, and data analysis. YHL: Participated in research design and data analysis. KNJ: Participated in research design. KS-S: Participated in writing of the paper. AC: Participated in research design.

References

- Schneider-Burrus S, Jost A, Peters EMJ, Witte-Haendel E, Sterry W, Sabat R. Association of hidradenitis suppurativa with body image. JAMA Dermatol 2018;154:447–51.
- Abbott W, Brett A, Brownlee TE, et al. The prevalence of disordered eating in elite male and female soccer players. Eat Weight Disord 2021;26:491–8. doi: 10.1007/s40519-020-00872-0.
- Makino M, Tsuboi K, Dennerstein L. Prevalence of eating disorders: a comparison of Western and non-Western countries. MedGenMed 2004;6:49.
- Sonneville KR, Lipson SK. Disparities in eating disorder diagnosis and treatment according to weight status, race/ethnicity, socioeconomic background, and sex among college students. Int J Eat Disord 2018;51:518–26.
- Orbitello B, Ciano R, Corsaro M, et al. The EAT-26 as screening instrument for clinical nutrition unit attenders. Int J Obes (Lond) 2006;30:977–81.
- Cifra N, Chen YFM, Greenberg K. EAT-26 performance in gender health clinic patients. J Adolesc Health 2019;64:S102. doi: 10.1016/j. jadohealth.2018.10.217.
- Hazzard VM, Loth KA, Hooper L, Becker CB. Food insecurity and eating disorders: a review of emerging evidence. Curr Psychiatry Rep 2020;22:74.

Amina Ziad, BA^{ab} Yiwen Helen Li, BS^{b,c} Kristin N. Javaras, DPhil, PhD^{a,d} Karla Santiago-Soltero, BS^{ab} Alexandra Charrow, MD, MBE^{ab,*} ^a Harvard Medical School, Boston, Massachusetts ^b Department of Dermatology, Brigham and Women's Hospital, Boston, Massachusetts ^c Emory School of Medicine, Atlanta, Georgia ^d Department of Psychiatry, McLean Hospital, Belmont, Massachusetts

> * Corresponding author. E-mail address: acharrow@bwh.harvard.edu (A. Charrow).