Table II. Comparison of treatment satisfaction with nonconventional versus conventional therapies

Fisher's exact test *P* value = .005	Dissatisfied, n (%)	Satisfied, n (%)
Nonconventional therapy*	6 (15.8)‡	32 (84.2)‡
Conventional therapy†	13 (50.0)‡	13 (50.0)‡

*Lifestyle modification, alternative therapy.
†Antibiotics, steroids, biologics, phototherapy, laser, surgery, hormone therapy, spironolactone.
‡Of 107 videos that addressed treatment outcomes, 43 videos that mentioned treatment satisfaction with both conventional and nonconventional treatment methods were omitted from this analysis, which included 64 videos to better isolate if one method had a higher proportion of satisfaction than the other.

that addressed treatment outcomes, 30% (32/107) and 70% (75/107) reported satisfaction and dissatisfaction, respectively. Patients reported higher satisfaction with nonconventional therapies (Supplemental Table II; available via Mendeley at https://doi.org/10.17632/jmjzr2zhyx.1) compared to conventional therapies (84.2% vs 50.0%; $P = .005$) (Table II).

In conclusion, YouTube is a valuable data source for investigating HS patient perspectives and shows potential unmet needs expressed by patients with HS, including deficiencies in patient education, paucity of psychosocial support, delays to diagnosis, inadequate pain control, and treatment dissatisfaction. The fact that social media has become a key source of information from which patients make health-related decisions, in conjunction with the relative shortage of reputable sources of medical information on YouTube, highlights the need for dermatologists to expand their online presence to improve patient outreach.

Wendy Li, MD,[a] Janice E. Ma, MD,[b] Alfred A. Chan, BS,[c] Delphine J. Lee, MD, PhD,[b,c,d] and Jan Smogorzewski, MD[b,c,d]

From the Indiana University School of Medicine, Indianapolis, Indiana[a]; Division of Dermatology, Harbor-UCLA Medical Center, Torrance, California[b]; Department of Medicine, The Lundquist Institute, Torrance, California[c]; and David Geffen School of Medicine at UCLA, Los Angeles, California.[d]

Funding sources: None.

Conflicts of interest: None disclosed.

IRB approval status: Not applicable.

Reprints not available from the authors.

Correspondence to: Jan Smogorzewski, MD, Division of Dermatology, Department of Medicine, Harbor-UCLA Medical Center, 1000 W Carson St, Torrance, CA 90502

E-mail: jan.smogorzewski@lundquist.org

REFERENCES

1. Fox S. The social life of health information, 2011. Pew Research Center. Available at: https://www.pewresearch.org/internet/2011/05/12/the-social-life-of-health-information-2011/; 2011. Accessed December 19, 2019.
2. Chen YY, Li CM, Liang JC, et al. Health information obtained from the internet and changes in medical decision making: questionnaire development and cross-sectional survey. *J Med Internet Res*. 2018;20(2):e47.
3. Guzman AK, Wang RH, Nazarian RS, et al. Evaluation of YouTube as an educational resource for treatment options of common dermatologic conditions. *Int J Dermatol*. 2020;59(3):e65-e67.
4. Alikhan A, Sayed C, Alavi A, et al. North American clinical management guidelines for hidradenitis suppurativa: a publication from the United States and Canadian Hidradenitis Suppurativa Foundations: part I: diagnosis, evaluation, and the use of complementary and procedural management. *J Am Acad Dermatol*. 2019;81(1):76-90.
5. Horvath B, Janse IC, Sibbald GR. Pain management in patients with hidradenitis suppurativa. *J Am Acad Dermatol*. 2015;73(5 Suppl 1):S47-S51.

https://doi.org/10.1016/j.jaad.2020.05.148

Low prescription of tumor necrosis alpha inhibitors in hidradenitis suppurativa: A cross-sectional analysis

To the Editor: Up to 68% of patients with hidradenitis suppurativa (HS) have moderate to severe disease. Although no uniformly effective treatments exist in HS, the highest efficacies are observed with tumor necrosis alpha inhibitors (TNFα-i) adalimumab and infliximab (Ada/Ifx). The real-world frequency of HS patients' use of TNFα-i is unknown.

In this cross-sectional analysis, we estimated the percentage of patients with HS receiving a prescription for Ada/Ifx and determined associated characteristics. Patients with HS were identified in Explorys by at least 1 International Classification of Diseases, ninth revision (705.83) or International Classification of Diseases, 10th revision (L73.2) diagnosis code.[1] The primary outcome was number of patients with HS having active status in the database for at least 3 years during the study period and who received at least 1 prescription for Ada/Ifx between September 10, 2015, and January 6, 2020. Those with medical contraindications to or having additional medical indications for TNFα-i treatment were excluded.

Table I. Clinical characteristics of patients with HS stratified by established relationship with dermatology

Characteristics	Overall HS population (n = 25,966)	Relationship with dermatologist (n = 4612)	No relationship with dermatologist (n = 21,354)
Age, y, mean (SD)	39.2 (13.5)	38.9 (13.7)	39.3 (13.5)
Female, n (%)	20,383 (78)	3676 (80)	16,707 (78)
Race, n (%)			
White	14,580 (56)	2511 (54)	12,069 (57)
Black	9517 (37)	1750 (38)	7767 (36)
Other	1869 (7)	351 (8)	1518 (7)
Insurance type, n (%)*			
Private	8784 (70)	1513 (75)	7271 (69)
Medicaid	2064 (17)	300 (15)	1764 (17)
Medicare	1025 (8)	114 (6)	911 (9)
Self-pay	196 (2)	15 (1)	181 (2)
Other	407 (3.3)	66 (3)	341 (3)
Missing	13,490 (52)	2604 (56)	10,886 (51)

HS, Hidradenitis suppurativa; *SD,* standard deviation.
*Percentages among those not missing insurance data.

Table II. Factors associated with adalimumab or infliximab prescription among patients with HS

Factors	Patients with HS with ADA/IFX prescription, % (n/total)	Crude OR (95% CI)	Adjusted OR* (95% CI)	*P* value, adjusted OR
Overall	1.8 (471/25,966)	—	—	
Age, y		1.16† (1.08-1.24)	1.17† (1.09-1.26)	<.001
18-29	1.9 (141/7486)			
30-39	2.3 (154/6827)			
40-49	1.9 (106/5456)			
50-59	1.5 (59/4031)			
60-69	0.6 (10/1686)			
70-79	0.2 (1/406)			
80-89	0.0 (0/74)			
Sex				
Female	1.6 (331/20,383)	Ref	Ref	
Male	2.5 (140/5583)	1.56 (1.28-1.90)	1.76 (1.43-2.16)	<.001
Race				
White	1.7 (247/14,580)	Ref	Ref	
Black	1.8 (175/9517)	1.09 (0.89-1.32)	1.04 (0.85-1.27)	.69
Other	2.6 (49/1869)	1.56 (1.15-2.13)	1.41 (1.02-1.93)	.04
Established relationship with dermatologist‡				
Yes	6.0 (276/4612)	6.91 (5.73-8.32)	6.93 (5.75-8.35)	<.001
No	0.9 (195/21,354)	Ref	Ref	

ADA, Adalimumab; *CI,* confidence interval; *HS,* hidradenitis suppurativa; *IFX,* infliximab; *OR,* odds ratio; *Ref,* reference.
*Odds ratio derived from a logistic regression model including terms for age (continuous), sex, race, and relationship with dermatologist.
†Odds ratio associated with 10-year younger age.
‡Defined as 2 or more encounters with a dermatologist less than 12 months apart during the study period.

Characteristics of the study cohort are described in Table I. Overall, 1.8% (471/25,966) of patients with HS received a prescription for Ada/Ifx. Only 17.8% (4612/25,966) of patients had an established dermatology relationship. The percentage of patients with HS receiving a prescription for Ada/Ifx was highest (6%) among those with dermatology care. Patients with an established relationship with a dermatologist had 6.93 (95% confidence interval, 5.75-8.35) times the odds of Ada/Ifx prescription compared to those without a history of care by a dermatologist (Table II).

Evidence-based North American and European treatment guidelines are consistent in their recommendations on treatment for moderate to severe HS. Moreover, many HS centers take the approach of treating milder disease more

aggressively with the goal of thwarting progression and eventual debilitation. Taken together, patients with HS with moderate to severe disease and, potentially, those with milder HS, may be undertreated. Undertreatment is likely to result in additional morbidities such as symptoms reflecting progression in course, including pain, drainage, odor, and disease flares.[2]

In a prior study, having established dermatology care resulted in the greatest likelihood of initiating and escalating treatment for HS.[3] This observation is likely related to the expertise of dermatologists in evaluating and managing patients with HS, as well to familiarity with use of biologics. However, use of dermatology care by patients with HS in this analysis was low, as it was in a 2017 study in which only 22% of patients with HS were observed to have an established dermatologist.[4] Moreover, a third of HS patients having a dermatologist report difficulty accessing their doctor.[2] Accordingly, there is likely opportunity to improve morbidity in HS by augmenting awareness of the role of dermatologists, by improving access, and by our timely use of more effective interventions.

Whether men or younger patients with HS have greater disease severity or are more willing to accept biologic treatment warrants further study. Our inability to capture patients who did not seek care in health systems included in the database is a limitation.

In conclusion, we observed a very low percentage of patients with HS receiving prescription for Ada/Ifx, including those with a dermatology relationship. Biologic therapy may not be appropriate for all patients with moderate to severe HS. Nonetheless, our results suggest an opportunity to improve symptoms and disease course in HS by expanding the appropriate use of Ada/Ifx, consistent with efficacy data and treatment guidelines.

Lauren A. V. Orenstein, MD,[a] Shari Wright, BS,[b] Andrew Strunk, MA,[b] and Amit Garg, MD[b]

From the Department of Dermatology, Emory University School of Medicine, Atlanta, Georgia[a]; and Department of Dermatology, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, New Hyde Park, New York.[b]

Funding sources: Lauren A.V. Orenstein's participation was supported in part by the Building Interdisciplinary Research Careers in Women's Health of the National Institutes of Health under award number K12D085850. The funding agency did not have any input in the study design, data collection, data analysis, manuscript publication, or publication decisions. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Disclosure: Lauren A.V. Orenstein is an investigator for Chemocentryx. Amit Garg is an advisor for AbbVie, Amgen, Boehringer Ingelheim, Incyte, Janssen, Novartis, Pfizer, UCB, and Viela Bio and receives research grants from AbbVie and the National Psoriasis Foundation. Authors Wright and Strunk have no conflicts of interest to declare.

IRB approval status: Reviewed and approved by the human subjects committee of the Feinstein Institutes for Medical Research at Northwell Health.

Reprints not available from the authors.

Correspondence to: Amit Garg, MD, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, 1991 Marcus Avenue, Suite 300, New Hyde Park, NY 11042

E-mail: amgarg@northwell.edu

REFERENCES

1. Strunk A, Midura M, Papagermanos V, Alloo A, Garg A. Validation of a case-finding algorithm for hidradenitis suppurativa using administrative coding from a clinical database. *Dermatology*. 2017;233(1):53-57.
2. Garg A, Neuren E, Cha D, et al. Evaluating patients' unmet needs in hidradenitis suppurativa: results from the Global VOICE project. *J Am Acad Dermatol*. 2019;82(2):366-376.
3. Garg A, Besen J, Legler A, Lam CS. Factors associated with point-of-care treatment decisions for hidradenitis suppurativa. *JAMA Dermatol*. 2016;152(5):553-557.
4. Garg A, Lavian J, Strunk A. Low utilization of the dermatology ambulatory encounter among patients with hidradenitis suppurativa: a population-based retrospective cohort analysis in the USA. *Dermatology*. 2018;233(5):396-398.

https://doi.org/10.1016/j.jaad.2020.07.108

Impact of hidradenitis suppurativa on work productivity and associated risk factors

To the Editor: Matusiak et al[1] showed that hidradenitis suppurativa (HS) caused absenteeism in 58.1%