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Letter to the Editor

Hidradenitis Suppurativa: Management via Teledermatology Compared to In-Person Encounters

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TO THE EDITOR:

Hidradenitis suppurativa (HS) is an inflammatory skin condition characterized by follicular occlusion and inflammation that leads to pustules, nodules, papules, or abscesses in the axilla, buttocks, or groin with significant morbidity [1]. Diagnoses of HS are often delayed due to lack of access to dermatology care [2]. Teledermatology (TD) platforms have become an electronic form of healthcare that has increased in utility due to the COVID-19 pandemic. Prior studies have demonstrated that TD platforms using either synchronous video visits, asynchronous digital imaging, or a hybrid of both are accurate and effective mediums to increase access to care and to triage patients with more severe conditions to in-person visits more efficiently [3,4]. To our knowledge, no studies compare these HS care modalities. Our retrospective study compares in-person to synchronous and asynchronous TD platforms. This was a retrospective cohort study analyzing 121 patients from 2021-2024, from Western Pennsylvania, in 3 populations: in-person patients (40), patients who attended synchronous TD patients (34), and asynchronous TD patients (47). Using UPMC Health System Epic electronic medical record, we recorded each patient's age, race, BMI, Hurley Stage, tobacco use, and whether the patient was treated with a biologic. Demographic information is shown in Table 1. P-values were generated using odds ratios with MedCalc Software [5]. In-person and synchronous TD HS patients had similar average BMIs (34.5 vs 38.37), an equal average Hurley stage (1.76 vs 1.76), an equal percentage of patients on biologics (38% vs 38%), and similar percentages of patients of color (12.5% vs 17.6%). In-person, HS patients were significantly more likely to have tobacco usage (OR: 4.833, 95CI: 1.9140 to 12.2054, z= 3.334, p=0.0009). Both in-person patients and synchronous TD patients were significantly more likely than asynchronous TD patients to be prescribed a biologic such as adalimumab or secukinumab for their HS (OR: 0.0741, 95%Cl (0.0157 to 0.3505), z=3.282, p=0.0010), (OR: 13.92, 95%CI (2.8797 to 67.3705), z=3.275, p=0.0011). Out of the 3 groups, the asynchronous TD visits were the most racially diverse, with more than half of the patients being racial minorities (OR: 7.304, 95% 2.4358, 21.89, Z=3.55, p=0.0004). Our study suggests the demographics, disease severity of HS, and treatment recommendations of patients seeking in-person care are similar to those attending synchronous TD video visits. Asynchronous TD visits have been demonstrated to increase access by streamlining the process of initiating patients on non-biologic therapy and triaging for biologics during in-person encounters. Because HS disproportionately affects patients of color and our findings of the significant use of asynchronous TD by this population, further work should be done to use this modality to help with initial triage of HS patient's management [1]. However, more advanced treatments are more often accomplished via in person or synchronous TD visits.

IRB APPROVAL STATUS: approved by the institutional review board of University of Pittsburgh (STUDY22010151).

PATIENT CONSENT: This retrospective study used de-identified data and has IRB approval

Table 1: Demographics of HS population

Significant=*	In-Person Encounters	Asynchronous TD	Synchronous TD
Number of pts	40	47	34
Average Age	37.1	34.2	34.2
Average BMI	34.5	36.4	38.37
Average Hurley Stage	1.76	1.05*	1.76
Number of pts on biologics	15 (38%)*	2 (4.2%)	13 (38%)*
Number of patients with past/present tobacco use	30 (75%)*	18 (38%)	21 (61%)
Number of white patients	34 (85%)	23 (48%)	28 (82%)
Number of nonwhite patients	5 (12.5%) All black	24 (51%)* 19 black, 2 Asian, 2 biracial	6 (17.6%) All black

Keywords : Teledermatology, Management, Skin of color, Hidradenitis suppurativa, Biologics, Smoking

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