

Sarecycline as a Novel Treatment Modality for Hidradenitis Suppurativa: A Clinical and Patient Perspective

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BACKGROUND

Hidradenitis suppurativa (HS) is a chronic debilitating skin disorder that is often worsened by the presence of microbial organisms. Sarecycline is a narrow-spectrum tetracycline-derived drug with fewer reported adverse events compared to other tetracyclines approved for acne vulgaris.

While doxycycline and minocycline are part of the core therapies, some patients experience adverse effects that limit their usage. Sarecycline may be a viable alternative to these therapies; it has not been previously explored as an antibiotic used to treat HS.

OBJECTIVE

To investigate the efficacy, patient satisfaction, and overall experience of sarecycline therapy for HS.

METHODS

We conducted an IRB-approved retrospective chart review of nine (9) patients at the Einstein/Montefiore HS Center (HSC) undergoing sarecycline treatment from 2020-2021. Of these 9 patients, seven (7) telephone interviews were completed.

The electronic medical record provided clinical and demographic information. Telephone surveys elicited patient satisfaction and overall experience.

Paired t-tests were used to determine statistical significance of HS-PGA improvement and NRS-Pain score reduction between baseline and most recent visit while on sarecycline.

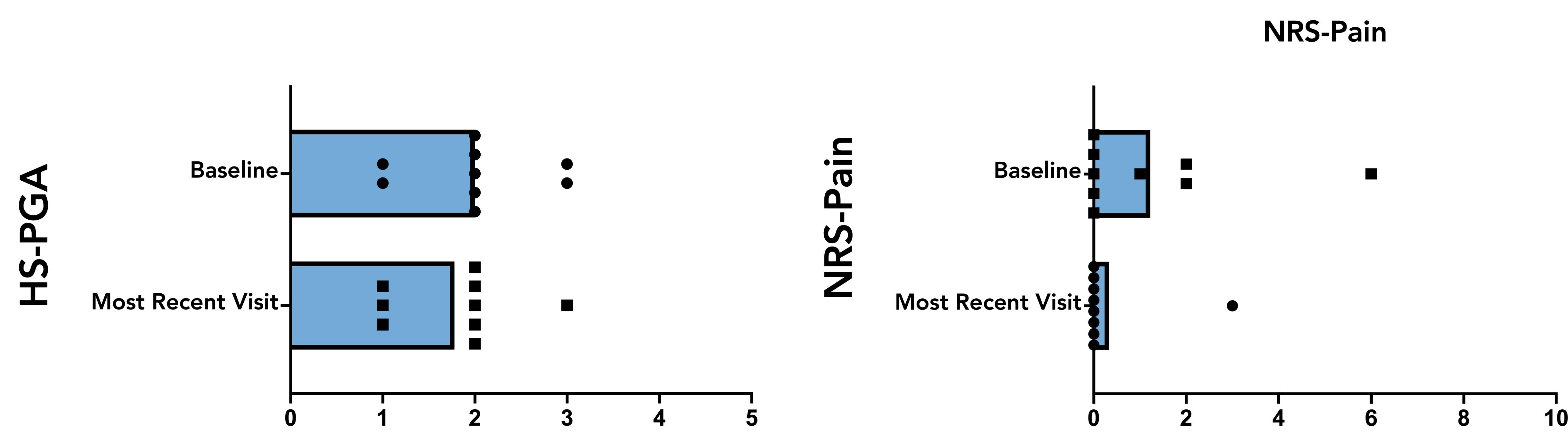
RESULTS

The mean age of participants was 33.0 ± 9.9 years; 7 were female (77.8%). The mean treatment duration was 150.8 ± 141.8 days. Although not statistically significant, HS-PGA improvement (2.0 ± 0.7 , 1.8 ± 0.67 , $p=0.35$) and NRS-Pain score reduction (1.2 ± 2.0 , 0.3 ± 1 , $p=0.30$) were recorded from baseline to most recent visit. Of 7 telephone interviews, all but one reported past doxycycline use and experienced at least one adverse effect (nausea, vomiting, and stomachache predominated). No patients taking sarecycline reported side effects. All would recommend sarecycline to other patients because of the perceived reduction or complete cessation of HS flares. Overall satisfaction with sarecycline was highly rated at 4.3 ± 1.5 (5 being very satisfied). Of note, 22 patients receiving care at the HS Center were prescribed sarecycline but only 9 approved by insurance. Of those 9, coverage was prematurely terminated for 2 patients despite reported improvement.

Table 1. Survey Questions and Results

Question	Response
Besides sarecycline, have you ever had any issues with any antibiotics?	A. Nausea (57.1% [4]) B. Vomiting (14.3% [1]) C. Diarrhea (14.3% [1]) D. Stomachache (42.9% [3]) E. Allergy (14.3% [1])
Which antibiotic did you experience these issues with?	A. Doxycycline (85.7% [6]) B. Minocycline (42.9% [3]) C. Clindamycin (14.3% [1]) D. Rifampin (14.3% [1])
Did you experience any side effects on sarecycline?	0% (0) Y, 100% (7) N
How satisfied are you with sarecycline compared to other antibiotics for HS (1-5, 5 being very satisfied)?	4.3 ± 1.5
Would you recommend sarecycline to other patients?	100% (7) Y, 0% (0) N

Figures 1-2. HS-PGA improvement and NRS-Pain score reduction while on sarecycline



DISCUSSION

In this study, HS severity and NRS-Pain scores improved with sarecycline ($p > 0.05$). Small cohort size likely represented a study limitation but there was not only high satisfaction with sarecycline but also no reported side effects compared to other commonly utilized antibiotics for HS. It is noteworthy that insurance posed a significant barrier to sarecycline therapy. Additional studies of sarecycline therapy for HS are warranted.