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Hidradenitis suppurativa disease course during pregnancy and postpartum

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Among our cohort, 54% were male, suggesting sex may be another unique characteristic of this codiagnosed group.

Further unique characteristics include relatively low rates of intravenous drug use (7% former use) and more likely acquisition through heterosexual intercourse (59%) than most patients with HIV.⁶ Due to missing data we were unable to characterize a link between HS disease activity and treatment or markers of HIV disease activity.

Our analysis revealed that misdiagnosis of HS among medical professionals is alarmingly high. We observed that only 37% of our cohort have an ICD code for HS, despite most having regular interactions with infectious disease specialists. Only 33% of these patients were referred to a dermatologist.

Study limitations include that the diagnosis of HS relied on chart review alone, which is subject to recall bias, but the presence of recurrent intertriginous nodules and abscesses is highly specific for HS. Additionally, our study lacked a match-controlled study group. Data, including on disease severity, were often missing in charts, and some historical laboratory data may have been missing if only present outside the University of North Carolina system. Such missingness is not likely to be associated with disease severity.

Our findings illustrate unique characteristics of a population with HIV and HS, supporting a possible association between HIV and HS diagnosis. Future investigation is warranted to explore whether HIV infection is linked to HS onset and severity. Additionally, the high rate of misdiagnosis of HS in the population living with HIV, despite frequent contact with healthcare providers, is reflective of previous reports of delayed diagnosis and misdiagnosis in the broader population of people with HS, which reinforces the need to increase physician knowledge of HS diagnosis and management.

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Conflicts of interest: C.S. wishes to disclose that he is a speaker, advisory board member and investigator for AbbVie; a speaker and investigator for Novartis; an advisory board member and investigator for UCB and InflaRx; and an investigator for Incyte and Chemocentryx.

Hidradenitis suppurativa disease course during pregnancy and postpartum: a retrospective survey study

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DEAR EDITOR, Hidradenitis suppurativa (HS) affects predominantly women of reproductive age and frequently flares during the perimenstrual period, indicating a hormonal influence.^{1–3}

Studies on the effect of pregnancy on HS disease severity have reported improvement, no change and worsening during pregnancy.^{4–8} We aimed to assess changes in HS disease course during pregnancy and postpartum and identify potential predictors of HS pregnancy outcomes.

An institutional review board-approved retrospective survey study was performed between July 2016 and June 2019 at three centres in the USA: Massachusetts General Hospital and Beth Israel Deaconess Medical Center (Boston); University of Pittsburgh Medical Center, and one in the Netherlands: University Medical Center Groningen (UMCG). Adult female patients with physician-verified HS prior to pregnancy were eligible to participate and completed the survey regarding their latest pregnancy. Pregnancy duration could be of any length and at any time in the past. Nulliparous and multiparous women were included. Patients were identified at dermatology outpatient clinics at all sites and via the HiSure registry (METc 2015/074) of the UMCG. The survey was given at clinic visits or on invitation via the registry and included questions on patient characteristics, disease severity, changes in symptoms, breastfeeding and self-reported pregnancy complications. Additional patient characteristics [body mass index (BMI), comorbidities, smoking status and family history] were included only in the UMCG survey (Table 1). Analyses were performed with the Kruskal–Wallis test for

Table 1 Patient characteristics

Characteristic	Value
Total cohort (N = 83)	
Age, mean (SD) years	40.4 (10.5)
Age of disease onset, mean (SD) years	20.3 (7.5)
Race, ^a n (%)	
Caucasian	52 (79)
Black	7 (10.5)
Other	7 (10.5)
Missing	17
Diagnostic delay, mean (SD)	7.9 (10.6)
Baseline self-reported severity, n (%)	
Mild	8 (10)
Moderate	40 (49)
Severe	33 (41)
Missing	2
Timing of most significant change (where provided) in HS symptoms during the most recent pregnancy, ^b n (%); n = 69 (of 74)	
1st trimester, n = 17	
Worse	5 (23)
No change	1 (6)
Better	11 (35.5)
2nd trimester, n = 18	
Worse	8 (36)
No change	1 (6)
Better	9 (29)
3rd trimester, n = 17	
Worse	9 (41)
No change	3 (19)
Better	5 (16)
No peak trimester specified compared with others, ^c n = 17	
Worse	0
No change	11 (69)
Better	6 (19)
Complications (n = 26), ^d n (%)	
Gestational hypertension	2 (8)
Preeclampsia	4 (15)
Gestational diabetes	2 (8)
Emergency C-section	5 (19)
Miscarriage	3 (11.5)
Preterm birth	3 (11.5)
Growth retardation	1 (4)
Other	6 (23)
UMCG cohort (n = 27)	
Age at latest pregnancy, mean (SD)	29.8 (4.9)
BMI, mean (SD)	30.2 (6.2)
Smoking status, n (%)	
Current smoker	12 (44)
Former smoker	10 (37)
Never smoked	5 (18.5)
Smoking during pregnancy, n (%)	
No	15 (58)
Yes	11 (42)
Number of cigarettes/day, mean (SD)	6.7 (4.0)
Missing	1
Positive family history, n (%)	14 (52)
Comorbidities, n (%)	
Hypercholesterolaemia	20 (74)
Obesity	9 (33)

(continued)

Table 1 (continued)

Characteristic	Value
Hypertension	3 (11)
Depression	3 (11)
Arthritis	3 (11)

BMI, body mass index; HS, hidradenitis suppurativa; UMCG, University Medical Center Groningen. ^aThese terms were used in the questionnaire. ^bThis section includes only those women who specified the trimester; some experienced change but did not note a difference across trimesters. ^cBased on the question asked. ^dIn total, 26 complications were reported by 25 (of 61) participants who answered; percentages are calculated from total complications.

categorical variables. P-values < 0.05 were considered statistically significant.

A total of 83 patients were included for analysis. Patient characteristics are shown in Table 1. Assistance for becoming pregnant was required in 11.5% (7 of 61). Previous miscarriages were reported in 42% of patients. Perimenstrual HS flares were reported in 43% (26 of 60) of patients. Changes in HS symptoms overall during pregnancy were reported by 74 patients, as follows: improvement (n = 33, 45%), no change (n = 19, 26%) and worsening (n = 22, 30%); 69 of these 74 gave further details (see Table 1). There were no differences in disease course during pregnancy or postpartum between nulliparous or multiparous women.

Of the women who described a trimester when the most change occurred, improvement primarily occurred earlier in the pregnancy (35.5% in the first trimester), while worsening occurred later in pregnancy (41% in the third trimester). A significant difference in change in HS symptoms across the trimesters was found (P < 0.05). When stratifying patients by disease severity, patients with self-reported moderate-to-severe disease were more likely to report worsening of symptoms during pregnancy than those with mild disease (32% vs. 17%). No difference in overall change of HS symptoms during pregnancy was found when comparing patients with perimenstrual flares to patients without (P = 0.54). Postpartum improvement was reported in 7.5% of patients compared with 69% reporting deterioration of symptoms postpartum. Worsening of HS symptoms within 3 months after giving birth was reported by 71% of patients. Of the subjects breastfeeding (51%, average duration 5.6 ± 7.9 months), the majority (60%) reported no changes in HS symptoms during breastfeeding. Complications during and after pregnancy were reported in 41% (25 of 61) of the women (Table 1). The number of complications was significantly impacted by increased disease severity (P = 0.04), but not by smoking or BMI (P = 0.23 and P = 0.55, respectively).

Our results show that over 40% of women experienced improvement of HS symptoms during pregnancy and primarily in the first trimester. Almost one-third of patients with moderate-to-severe HS experienced worsening of disease, mostly in the third trimester. Additionally, HS

symptoms worsened postpartum in close to 70% of patients, which was comparable to the study of Lyons et al.⁸ The treatment options for pregnant or nursing women with HS are limited, as many are contraindicated during pregnancy and breastfeeding. However, recommendations do exist for continuing biologic therapy throughout pregnancy in patients with inflammatory bowel disease (IBD), due to poorer pregnancy outcomes in untreated IBD.⁹ In patients with psoriasis, the association of birth defects or pregnancy complications remains under studied.⁹ Our study suggests that pregnant patients with moderate-to-severe HS should be counselled that their disease may worsen during pregnancy and that consideration should be given to continuing systemic immunosuppressive therapy (or starting it) as appropriate. Our findings should be evaluated further in larger cohorts of patients with confirmation from physician documentation of pregnancy outcomes.

This study is limited by small sample size, recall bias, the small number of patients with mild disease and patient-reported disease severity and complications. Multivariate analysis was not possible in our cohort due to the limited sample size. However, our results provide additional clinical insight into HS symptom fluctuations during and after pregnancy. This can help physicians to better counsel patients and to consider prescribing systemic therapy during pregnancy. Patients with moderate-to-severe HS should be closely monitored during the third trimester of pregnancy and directly postpartum to manage flares and to check for pregnancy complications.

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Comparing the clinical differences in white and black women with frontal fibrosing alopecia

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DEAR EDITOR, Frontal fibrosing alopecia (FFA) is a variant of lichen planopilaris, with characteristic bandlike frontotemporal hairline involvement and eyebrow loss. It most commonly occurs in postmenopausal white women.¹ In skin of colour (SOC) individuals, FFA is often misdiagnosed as traction alopecia (TA),² and few data exist regarding the presentation of FFA in the SOC patient population.³ As the incidence of FFA continues to increase,⁴ we aim to understand differences in presentation of FFA between white and black women in order to aid in accurate and timely diagnosis as well as help inform prognosis and management.

We performed a retrospective analysis of white and black female patients with FFA treated at the NYU Grossman School of Medicine Ronald O. Perleman Department of Dermatology from 2007 to 2018. Nineteen additional black patients were identified by reviewing female patients treated for FFA at the Callender Center for Clinical Research in Glenn Dale, Maryland, between 2010 and 2020. Waivers of consent were approved through institutional and independent review board approvals, respectively. Diagnosis of FFA