

Psychosocial impact and treatment trends of hidradenitis suppurativa in Singapore

Dear Editor,

Hidradenitis suppurativa (HS) is a common disease with a prevalence of about 1%.¹ Patients commonly suffer from pain, disfigurement and psychosocial embarrassment, and have a worse quality of life compared to other dermatologic conditions.^{2,3} It is frequently misdiagnosed as other skin infections and delays in diagnosis are associated with more psychosocial impairment.⁴ We examined the prevalence of psychosocial morbidity in a Singaporean Chinese cohort of HS patients and determine if the degree of morbidity is related to any disease or patient factors.

Fifty-eight Singaporean Chinese were recruited as part of another study that examined genetic variations in HS.⁵ HS was diagnosed clinically by dermatologists and site of involvement (axillary, inguinal, perineal or perianal, and buttock) recorded. The severity of disease was staged using the Hurley system. Information such as age, race, sex, smoking, height, weight, and history of surgical intervention, acne vulgaris, hyperlipidaemia, hypertension, pilonidal cyst, polycystic ovarian syndrome, and family history of HS was collected. Patients were asked 4 questions about the degree of symptom burden, embarrassment, interference with work and school, and interference with daily activities. These questions were adapted from the Dermatology Life Quality Index (DLQI) and responses were recorded on an ordinal scale from 0 (not at all) to 3 (very much so) (Table 1).

“Symptom burden”, “embarrassment”, and “interference with daily activities” were dichotomized into “0 or 1” and “2 to 3” responses, while “interference

with work and school” was dichotomized into “0” and “1 to 3” responses due to the data skew. Logistic regression analysis was performed with the above dichotomized responses as dependent variables and age, sex, smoking history, body mass index (BMI), axillary involvement, inguinal involvement, perineal or perianal involvement, buttock involvement, Hurley stage, history of surgical intervention, and family history of HS as independent variables. A two-sided *P* value of <0.05 was considered statistically significant. The study was approved by our institution’s ethics review board and all subjects signed informed consent.

The mean age was 31.1±10.7 years. Of the 58 patients, 72.4% were male, 36.2% were smokers and 24.1% had a BMI ≥30. Axillary, inguinal, perineal, and buttock regions were involved in 37.9%, 34.4%, 12.2% and 39.7% of patients, respectively; 55.2%, 27.8% and 17.2% had Hurley 1, 2 and 3 stage, respectively. In this study, 43.1% of patients had a history of surgical intervention, which ranged from incision and drainage of active lesions to wide excision. Forty-four (75.9%) patients had acne vulgaris, 2 had pilonidal cysts or abscesses, 1 had polycystic ovarian syndrome, 6 had hypertension and 11 had hyperlipidaemia. Ten patients had a family history of HS.

In the past 1 month, 86% of patients experienced symptoms, 78% of patients were embarrassed, 48% reported interference with work or school, and 78% reported interference with their daily activities (Table 1). Patients with a higher BMI (*P*=0.01), females (*P*=0.02), and those with a history of surgical intervention (*P*=0.02) reported worse symptoms.

Table 1. Questionnaire

Dependent variable	Question	Number of responses, no. (%)			
		0 (not at all)	1 (a little bit)	2 (somewhat)	3 (very much so)
Degree of symptom burden	Over the past 1 month, how itchy, sore or painful has your condition been?	8 (14)	27 (47)	18 (31)	5 (8)
Degree of embarrassment	At present, how embarrassed are you by your condition?	13 (22)	19 (33)	23 (40)	3 (5)
Degree of interference with work and school	Over the last 1 month, how much has your condition prevented you from attending work or school?	30 (52)	20 (34)	7 (12)	1 (1)
Degree of interference with daily activities	Over the past 1 month, how much has your condition interfered with your daily activities? (e.g. shopping, gardening, going out with friends, housework, hobbies, etc.)	13 (22)	26 (45)	15 (31)	4 (2)

Pain, itch or soreness was common, and females, those with a higher BMI, and those with a history of surgical intervention were more symptomatic. The degree of symptoms was independent of the site of involvement in this study. Pain may be acute and inflammatory or chronic and neuropathic in nature.⁶ Patients may seek surgical treatments to relieve pain. Some surgical treatments, such as incision and drainage, may only temporarily relieve pain. Apart from disease-modifying treatments, pain management in HS is crucial. Simple measures include good wound care and wearing loose clothing. Weight loss may reduce skin occlusion and friction. Commonly prescribed analgesics include paracetamol, non-steroidal anti-inflammatory drugs and opioids. When opioids are prescribed, short courses are recommended to reduce dependence.⁷ When pain develops a neuropathic quality, medications such as gabapentin, pregabalin and antidepressants may be considered. Occasionally, a referral for psychological therapy such as cognitive behavioural therapy may be warranted.⁸

Many patients are embarrassed to reveal their scars, by the malodour or by drainage causing staining of their clothes. This may lead to social withdrawal, poor interpersonal relationships, and increase risk of depression.⁹ Similar to pain, clinicians must be cognisant of this aspect of disease burden and spare some time to manage it sensitively.

There is a huge impact of HS on work, school and daily life. HS may cause impairments in function due to pain, fatigue, hospitalisation, poor interpersonal relationships, or psychiatric comorbidity. Furthermore, the mean age of 31 years of age is when people are most active economically, which can potentially lead to loss of income. In particular, those with a higher Hurley stage experienced greater interference in daily activities ($P=0.04$), and clinicians may consider using the Hurley stage to predict degree of socio-economic distress as a quick tool in a busy clinic.

The results of this study may not be generalisable to other ethnic groups as this was a Chinese population. The findings may not reflect the psychosocial burden faced by patients managed by other physicians. The Hurley system is unable to distinguish active disease from old burnt-out lesions, and it may underestimate the disease burden in patients suffering from active abscesses and inflammatory nodules. Although the questionnaire used in this study is not a validated quality-of-life assessment scale, it was adapted from the DLQI to allow patients to complete the questions more rapidly.

Furthermore, it assesses a longer period of a month instead of a week, which may be more fitting for HS given the chronic nature of the disease.

HS is a chronic debilitating disease that results in significant psychosocial comorbidity. Patients who are female, have a higher BMI, have a history of surgical intervention, or have a higher Hurley stage are more likely to suffer a greater degree of psychosocial burden. Holistic management of HS should encompass early disease-modifying treatment and prompt management of chronic pain, psychological and socio-economic complications.

Disclosure

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