

A review of patients managed at a combined psychodermatology clinic: a Singapore experience

Wan Ling Chung¹, MBBS, Shanna Shanyi Ng¹, MBBS, MRCP, Mark Jean Aan Koh¹, MBBS, MRCPCH, Lai Huat Peh², MMed, FAMS, Tsun-Tsien Liu¹, MMed, FAMS

INTRODUCTION Recognising and appropriately treating psychosomatic factors in dermatological conditions can have a significant positive impact on the outcomes of patients. Treatment of psychodermatological patients requires a multidisciplinary approach that involves dermatologists, psychiatrists and allied health professionals.

METHODS This was a retrospective case series of patients seen in our psychodermatology liaison conferences from November 2009 to July 2011. We reviewed all the case notes and analysed data such as age, gender, dermatologic and psychiatric diagnoses, treatment and outcome.

RESULTS The majority of patients in our cohort were diagnosed with either a psychophysiological disorder or a primary psychiatric disorder. The most common diagnosis among patients with primary psychiatric disorder was delusions of parasitosis. Other common primary psychiatric disorders seen were trichotillomania and dermatitis artefacta. About a fifth of our patients had psychiatric disorders resulting from their underlying dermatological conditions. A third of our patients were lost to follow-up.

CONCLUSION Managing patients with psychocutaneous disorders can be challenging, with many patients defaulting treatments. Psychodermatology clinics will benefit both patients and their caregivers. A collaborative approach using a consultation-liaison relationship between two medical departments in a friendly environment would result in more effective, integrated and holistic treatment strategies for such patients. Further studies should be conducted to determine how beneficial such services are to patients. With more experience, we hope to improve this service.

Keywords: cutaneous sensory disorders, primary psychiatric disorders, psychodermatology, psychophysiological disorders, secondary psychiatric disorders
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INTRODUCTION

There has recently been greater recognition of the significant role that psychosomatic factors play in dermatological conditions.⁽¹⁾ Evidence has shown that more than a third of dermatology patients have concurrent psychological or psychiatric disorders.^(2,3) This incidence is much higher when compared to the general population.^(4,5) Psychodermatology, a concept that focuses on the interplay between the psychosocial and dermatological states of a patient, has been shown to improve treatment results in some of these patients. According to the Koo and Lee classification, psychodermatological conditions can be classified into four categories of psychophysiological disorders – primary psychiatric disorders, secondary psychiatric disorders and cutaneous sensory disorders.⁽⁶⁻⁹⁾

Psychophysiological disorders occur when a skin condition is exacerbated by physiological factors such as stress and anxiety. This is typified by conditions such as psoriasis, acne vulgaris, hyperhidrosis, atopic dermatitis and lichen simplex chronicus, where patients often express a temporal relationship between stress and the worsening of their skin condition. In primary psychiatric disorders, dermatological complaints are secondary to an underlying psychiatric condition and a primary skin disorder is not identified. Examples include trichotillomania, dermatitis artefacta and delusions of parasitosis. Secondary psychiatric disorders occur when patients develop mental, emotional or social disturbances secondary to an underlying skin condition

that leads to cosmetic disfigurement, e.g. vitiligo, alopecia areata and psoriasis vulgaris. These conditions can adversely affect the quality of life of such patients.⁽¹⁰⁻¹²⁾ Cutaneous sensory disorders result in unpleasant, abnormal sensations on the skin such as burning and stinging, but the patients do not exhibit any underlying dermatological, neurological or other medical cause. There may, however, be underlying psychiatric issues. Some examples include glossodynia, vulvodinia, and chronic itching of the scalp.

The treatment of psychodermatologic patients requires a multidisciplinary approach that involves dermatologists, psychiatrists and allied health professionals. We present a retrospective case series of patients seen in our psychodermatology liaison conferences from November 2009 to July 2011.

METHODS

We reviewed the case notes of patients who were seen at the bi-monthly psychodermatology conferences jointly conducted by the Departments of Dermatology and Psychological Medicine at Changi General Hospital, Singapore. The patients, who were referred by the dermatologists, were seen from November 2009 to July 2011. Data collected included age, gender, dermatologic and psychiatric diagnoses, treatment and outcome. Patients who were lost to follow-up were contacted via the telephone to enquire about their progress and reasons for defaulting follow-up.

¹Department of Dermatology, ²Department of Psychological Medicine, Changi General Hospital, Singapore

Correspondence: Dr Wan Ling Chung, Medical Officer, Division of Dermatology, Changi General Hospital, 2 Simei Street 3, Singapore 529889. gnlnaw@gmail.com

Table I. Characteristics of patients seen in the psychodermatology conferences from May 2010 to July 2011.

Category*/ patient no.	Age	Gender	Dermatological diagnosis	Psychological diagnosis	Treatment recommended	Outcome
Psychophysiological disorders						
1	16	M	Poorly controlled atopic dermatitis	Stress reaction	Hypnotherapy	Completed 3 sessions of hypnotherapy
2	16	F	Poorly controlled atopic dermatitis	Inadequate coping mechanisms	Psychotherapy	Completed 1 session of psychotherapy
3	19	M	Lichen simplex chronicus	Stress reaction Night terror	Hypnotherapy	Completed 2 sessions of hypnotherapy
4	22	M	Acne excoriee	Anxiety Stress reaction Low self-esteem	Cognitive behavioural therapy	Defaulted
5	22	F	Acne vulgaris	Stress reaction Low self-esteem	Cognitive behavioral therapy Camouflage therapy	Defaulted
6	35	F	Hyperhidrosis	Stress reaction	Hypnotherapy	Completed 1 session of hypnotherapy
Primary psychiatric disorders						
7	57	M	Delusion of parasitosis	Delusion Alcoholic	Switch fluoxetine to risperidone	Continued PSY review
8	58	F	Delusion of parasitosis	Delusion	Risperidone	Defaulted
9	57	M	Delusion of parasitosis	Delusion Anxiety Care-giver stress	Psychotherapy	Completed 1 session of psychotherapy
10	54	F	Dermatitis artefacta	Major depression	Fluvoxamine	Defaulted
11	47	F	Trichotillomania	Trichotillomania	Fluoxetine	Continued PSY review
12	76	M	Lichen simplex chronicus	Body dysmorphic disorder	Fluoxetine	Defaulted
13	32	M	Psychogenic pruritus	Schizophrenia	Referred to IMH	Continued PSY review
Secondary psychiatric disorders						
14	31	M	Compensatory hyperhidrosis	Major depression	Switch escitalopram to bupropion	Continued PSY review
15	32	M	Hyperhidrosis	Depression	Psychotherapy	Completed 1 session of psychotherapy
16	47	F	Poorly controlled atopic dermatitis	Depression	Psychotherapy	Completed 1 session of psychotherapy
17	49	F	Melasma	Stress reaction Low self-esteem	Psychotherapy	Defaulted
Cutaneous sensory disorders						
18	40	F	Psychogenic pruritus	Somatoform disorder	None, adequate coping mechanisms	Discharged
19	65	F	Pruritus for investigation	Reactive mood changes	For blood and radiological investigations	Defaulted

*Categories are arbitrarily classified.

IMH: Institute of Mental Health (a tertiary psychiatric hospital); PSY: psychiatric

RESULTS

Table I summarises the patient demographics, diagnoses, treatments and outcomes. In all, 19 patients were seen during the study period. There were nine (47.4%) males and ten (52.6%) females. The median age of the patients was 40 (range 16–76) years. Six (31.6%) patients were diagnosed with psychophysiological disorders. Two patients (Patients 1 and 2) had atopic dermatitis, and one patient each had lichen simplex chronicus (Patient 3), acne excoriee (Patient 4), acne vulgaris (Patient 5) and hyperhidrosis (Patient 6). The dermatological conditions of these six patients were exacerbated by stress.

Seven (36.8%) patients were diagnosed with primary psychiatric disorders. Three patients (Patients 7, 8 and 9) had delusions of parasitosis. Patient 9 had concomitant anxiety disorder and caregiver stress as the exacerbating stressors. Patient 10 had dermatitis artefacta with associated major depression, while Patient 11 had trichotillomania and Patient 12 had body dysmorphic disorder manifested by lichen simplex chronicus. Patient 13 had psychogenic pruritus with underlying schizophrenia.

Four (21.1%) patients were diagnosed with secondary psychiatric disorders. Two patients (Patients 14 and 15) had

hyperhidrosis, causing depression. Patient 16 had poorly controlled eczema, with associated depression. Patient 17 had melasma, leading to emotional stress and low self-esteem. Two patients were classified as having a cutaneous sensory disorder. Patient 18 had psychogenic pruritus with somatoform disorder. Patient 19 had unexplained pruritus, with a psychological diagnosis of reactive mood changes. She was scheduled for further blood and radiological investigations but defaulted.

Out of the 19 patients, 18 (94.7%) required further intervention after assessments at the psychodermatology conferences. Four (21.1%) patients were started on psychiatric medications: Patient 8, with a diagnosis of delusion of parasitosis, was started on risperidone; Patient 10, diagnosed with major depression and dermatitis artefacta, was started on fluvoxamine; Patient 11, diagnosed with trichotillomania, and Patient 12, diagnosed with body dysmorphic disorder, were both started on fluoxetine.

Two (10.5%) patients had their psychiatric medications changed after consultation at the psychodermatology clinic. Patient 7, who had delusion of parasitosis and alcoholism, was switched from fluoxetine to risperidone, while Patient 14, who had major depression from compensatory hyperhidrosis, was switched from escitalopram to bupropion. Patient 13 was referred to a tertiary psychiatric centre for the management of underlying schizophrenia.

Five (26.3%) patients were started on psychotherapy (Patients 2, 9, 15, 16 and 17). Two patients had poorly controlled atopic dermatitis, one had delusions of parasitosis, one had depression from hyperhidrosis, and one had low self-esteem from melasma. Three (15.8%) patients were started on hypnotherapy (Patients 1, 2 and 6), as they had poorly controlled atopic dermatitis, lichen simplex chronicus and hyperhidrosis, respectively. All three patients' conditions were exacerbated by stress. Two (10.5%) patients commenced cognitive behavioural therapy; Patient 4 had acne excoriee associated with anxiety, stress and low self-esteem, while Patient 5 had acne vulgaris associated with stress and low self-esteem. Only one patient (Patient 18) was deemed to have sufficient coping mechanisms and was discharged without further treatment.

Seven of the 19 (36.8%) patients defaulted follow-up treatment. Two of these patients had psychophysiological disorders, three had primary psychiatric disorders, and the remaining two had secondary psychiatric disorder and cutaneous sensory disorder, respectively. Seven of the ten patients who were prescribed cognitive behavioural therapy, hypnotherapy or psychotherapy completed the recommended treatments. Out of the six patients who needed psychiatric medications, three were compliant to further psychiatric reviews. Of the 18 patients who required further treatment, only 11 (57.9%) were compliant.

DISCUSSION

Although the concept of psychodermatology has been present for the past few decades, there have been few case series reviewing the experiences of existing psychodermatology services. The psychodermatology conferences conducted by our institution are

unique in Singapore. These sessions, unlike the consultation-style of existing psychodermatology clinics, are held in a non-threatening environment of a family room within the hospital and last 1–2 hours per patient. Family members may be present at the request of the patient, although they may be required to leave the conference when sensitive issues are discussed.

The proportion of male and female patients seen at our psychodermatology conferences was almost equal. This is in contrast to data from a UK study examining 149 patients referred by dermatologists to the Dermatology-Psychiatry clinic, where 59% of their patients were female and 41% were male.⁽⁴⁾ This also differs from a Spanish study of 365,262 psychiatric consultations, where 59% of the patients were female.⁽¹³⁾ The median age of the patients in this study was 40 years, with a diverse mix of patients from the adolescence to geriatric age groups. Our patients were mainly in the 15–65 years age group ($n = 17$, 89.5%), with only two (10.5%) patients older than 65 years of age. The age distribution of our patients is comparable to that of the Spanish study,⁽¹³⁾ where 81.4% of the patients were aged 0–65 years and 11.4% were older than 65 years of age.

The majority of patients in our cohort were diagnosed with either a psychophysiological disorder or a primary psychiatric disorder. Most of our patients with psychophysiological disorders expressed that stress worsened their skin disease. Emotional stress has been known to precipitate or exacerbate many skin conditions, including but not limited to, psoriasis, atopic dermatitis, pruritus, alopecia areata and urticaria, although the exact pathophysiological mechanism for this remains unclear. There is increasing evidence that stress contributes to inflammation by modulating the hypothalamic-pituitary-adrenal axis and releasing neuropeptides, neurotrophins and other pro-inflammatory chemical mediators from nerve endings and dermal cells.⁽¹⁴⁾

The most common diagnosis among patients with primary psychiatric disorder was delusional parasitosis. This is a syndrome in which the patients have a false belief that they are being infested by parasites. Although delusional parasitosis is a primary psychiatric disorder, patients usually present to a dermatologist, bringing with them containers or sticky tape containing bits of excoriated skin, debris, insects or insect parts. Many patients with this syndrome have an underlying psychiatric disorder or physical illness. Delusional parasitosis has been reported in association with schizophrenia, paranoid states, bipolar disorders, depression, anxiety and obsessive states.⁽¹⁵⁾ Treatment is challenging, as patients would often have visited many physicians and may be hostile, especially on any suggestion that their conditions may be psychological. Therefore, it is essential that physicians engage the patients in their management. Low-dose atypical antipsychotics are currently the treatment of choice, with risperidone being the most commonly used drug in this category.⁽¹⁶⁾ Risperidone can be started at a dose of 0.25–0.5 mg at bedtime, with a gradual increase every few weeks up to 4 mg per day on a twice daily schedule, if insufficient clinical improvement is observed. After titration, the patient may take the entire dose at bedtime. It is, however,

prudent to advise patients of the initial sedating effects and that this effect should decrease after the first few days of usage. As risperidone is known to prolong the QT interval, it should be used with caution in patients with abnormal baseline QT intervals, or in those on other medications such as antiarrhythmics, which can prolong QT intervals.⁽⁸⁾ Two of our patients with delusional parasitosis were started on risperidone, while psychotherapy was deemed to suffice for the third patient. Of the two patients on risperidone, one patient had defaulted treatment for fear of her family members knowing about her condition. The other patient had improved clinically and was still receiving therapy at the time of writing.

Trichotillomania is another primary psychiatric disorder seen among our patients. This is a disorder of impulse control, leading to recurrent pulling of hair and resulting in noticeable hair loss. Scalp hair is most commonly affected, but some patients may also pull hairs from other body parts, e.g. eyelashes. These patients experience an increasing sense of tension immediately before an episode of hair pulling or when attempting to resist the behaviour. They would feel a relief of tension and often a feeling of gratification after hair pulling.⁽¹⁷⁾ Childhood trauma and emotional neglect may play a role in the development of this disorder.⁽¹⁸⁾ Patient 11, diagnosed with trichotillomania with an element of dysthymia and started on fluoxetine 10 mg each night, was reviewed by her psychiatrist the following month to have improvements in her mood and frequency of hair pulling episodes, with evidence of new hair growth. Over the weeks, she was reviewed at regular intervals of 6–8 weeks, with the dose of fluoxetine titrated up in steps to 20 mg twice a day. By the ninth month of treatment, the patient was sporting a short crop of hair and had significant mood improvements. She remains under the care of the psychiatrist at the time of writing. In addition to psychotropic medications, behavioural therapy has been shown to be helpful in single case studies with up to two-year follow-up.⁽¹⁹⁾

Dermatitis artefacta, a primary psychiatric disorder, is more commonly seen in women. Patients have self-inflicted cutaneous lesions. These lesions are generally symmetrical and within reach of the dominant hand, with bizarre geometrical shapes and sharp borders, induced by a variety of mechanisms such as cutting, burning, scratching, punching, sucking, biting and even applying caustic or heated agents. Some associated conditions include obsessive compulsive disorder, borderline personality disorder, depression, psychosis and mental retardation.^(20,21) It is important to consider any possibility of sexual or physical abuse in such cases.^(22,23) It is also essential to adopt a supportive and nonjudgemental approach in the treatment of dermatitis artefacta. Relaxation exercises and medications such as antidepressants or antipsychotics are known to be helpful.⁽²⁴⁾ Our patient was started on fluvoxamine to treat the associated depression.

About a fifth of our patients had psychiatric disorders resulting from their underlying dermatological conditions. Two patients with hyperhidrosis and one with poorly controlled atopic dermatitis developed major depression, while another patient

with melasma suffered from low self-esteem. All four patients required treatment, either in the form of pharmaceutical agents or psychotherapy. Although depression is generally linked to cosmetically disfiguring conditions such as alopecia areata, vitiligo, severe acne vulgaris and psoriasis, it has also been reported in patients with hyperhidrosis and melasma.⁽²⁵⁾

About a third of our patients were lost to follow-up. It is difficult to conclude if these patients defaulted due to their underlying personalities, lack of motivation, or if the psychodermatology conferences were not able to address their expectations. In our telephone survey, four out of the seven patients who defaulted responded to our questions. Two patients expressed concern about stigmata from further psychiatric reviews. Another patient was unable to attend further review due to work commitments. The last patient missed her scheduled outpatient appointments, as she was hospitalised for an unrelated condition. It is heartening to note that 57.9% (11/19) of our patients were compliant to the prescribed therapies, psychiatric medications or further psychiatric reviews. Our data is comparable to a study of 26 patients referred to a psychodermatology clinic, of which 12 (42.3%) were lost to follow-up.⁽⁴⁾

Medical approaches alone are often insufficient in the treatment of dermatological disorders. Chronic intractable or cosmetically disfiguring conditions can bring about significant morbidity and negative impact on the quality of life, necessitating psychological support.⁽²⁶⁾ Dermatological patients may also have concurrent psychiatric disorders but may not seek formal psychiatric help due to the stigma involved. Hence, it is important that physicians are made aware of the psychological impact caused by dermatological problems and vice versa. Physicians have to employ a supportive and nonjudgemental attitude when dealing with such patients. In a five-year study to assess the impact of psychological/psychiatric assessment and intervention in patients with chronic or intractable dermatological conditions, a favourable response, measured as remission or improvement, was noted in 40 out of the 64 patients who participated in the study.⁽²⁷⁾

Psychotherapy can be employed in clinical practice to different degrees, according to the training and facilities available. Psychotherapy can exist as (but not limited to the following forms) basic psychosomatic care by the dermatologist, psychosomatic or behavioural therapy by the psychotherapist and/or the psychiatrist, as well as educational programmes for patients with chronic skin conditions. An example of psychotherapy is behavioural therapy, which seeks a targeted change in dysfunctional experience and behavioural patterns. This involves training self-confidence or better control of an action, such as scratching or hair pulling. Although studies on the differential efficacy of specific psychotherapy methods in the different skin diseases are not uniform or have not been adequately researched, studies on the efficacy of mental disorders such as anxiety and secondary depression have been positive.⁽¹⁹⁾

Psychodermatology is not a new topic in the field of dermatology, but it has emerged in importance only in recent

decades. Knowledge and awareness of psychocutaneous disorders among dermatologists is still lacking. In a mailed survey study, out of 108 respondents, only 18% of the dermatologists reported a clear understanding of psychodermatology, and 42% of the respondents reported being very uncomfortable in diagnosing and treating psychocutaneous disorders.⁽²⁸⁾ The lack of formal training and literature on psychocutaneous disorders may be some of the factors contributing to this current suboptimal state of awareness.

In addition to increasing the state of awareness among physicians, more can be done to educate the general public on the causation and treatment of psychiatric illness and psychocutaneous disorders in the hope that this will reduce the associated stigma and discrimination. This can take place in the form of more social campaigns and school workshops. Despite the high prevalence of mental health problems, societies still hold deep-rooted and often negative beliefs about psychiatric illnesses, which can impede a patient's desire to seek treatment.⁽²⁹⁾

In conclusion, we have presented a review of the patients that were seen in our psychodermatology conferences, including the patient profiles, diagnoses, treatments and outcomes. Management of these patients can be challenging, with many patients defaulting treatments. Psychodermatology clinics will benefit both patients and their caregivers. A collaborative approach using a consultation-liaison relationship between two medical departments in a friendly environment will result in more effective, integrated and holistic treatment strategies for patients with psychocutaneous disorders. Further studies should be done to determine how beneficial such services are to patients. With more experience, we hope to improve this service.

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