Original Article

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Psychiatric Disorders with Dermatological Symptoms – An Open, Cross Sectional, Observational Study

Santoshdev P. Rathod[1], Ashish Jagati[2], Raju G. Chaudhary[3], Arwinder Kaur Brar[4], Soham B. Buch[5], Kalgi D. Baxi [6]

Author Affiliation:
[1] Associate Professor [2] Assistant Professor [3] Professor and Head of Department [4,6] Resident Doctor, Department of Dermatology, [5] Resident Doctor, Department of Psychiatry, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat 380006, India.

Corresponding Author:
Santoshdev P. Rathod, Associate Professor, Department of Dermatology, Venereology and Leprology, Smt. NHL Municipal Medical College, Ahmedabad, Gujarat 380006, India.
E-mail: Santosh_rathod85@yahoo.com

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Abstract

Background: Psychodermatology encompasses disease that involve the complex interaction between the mind, the cutaneous nerve, the cutaneous immune system and their cutaneous manifestations. The relationship between the skin and the mind is complex and despite its clinical importance, remains underexplored and under-reported. *Objectives:* To detect the frequency and type of psychiatric disorders among patients with dermatologic symptoms presenting to the skin out-patient department of a tertiary care hospital in western India. *Methodology:* An open, cross sectional, observational descriptive study was conducted, including all patients with some dermatologic manifestation of primary psychiatric disorder excepting patients with known chronic/medical illness, pregnant, lactating, and those already on any psychiatric medication, the patients were then referred to psychiatry department of our hospital for further evaluation and confirmation of the diagnosis. *Results:* Among 50 serial patients studied, 39 were females and 11 males. Most of the cases were in 2nd to 5th decade, the mean age being 28 years. The frequency-distribution of the associated psychodermatological disorder was neurotic excoriations (30%), being the most common, psychogenic pruritus (24%), lichen simplex chronicus (20%), acne excoriee (10%), trichotillomania (6%), delusional parasitosis (6%), onychophagia (2%), and dermatitis artefacta (2%). Most common underlying psychiatric disorders included obsessive and compulsive disorder (43%), anxiety disorders (27%), and major depression (26%). Schizophrenia, substance abuse, and bipolar disorder, each were detected in 1.3%. A stressor could be identified in 60% of psychodermatologic patients. SSRIs (Serotonin reuptake inhibitors) were the most commonly used medication along with habit reversal behavioral therapy, followed by benzodiazepines and antipsychotics. *Conclusion:* It can be inferred that patients do not realize and even if they occasionally do or are made aware of their psychiatric disorder, they prefer consulting a dermatologist rather than a psychiatrist due to the prevailing stigma related to mental illness. Increased understanding of the complex needs of these patients is necessary for a dermatologist, the value of shared care with a psychologist and a psychiatrist is highly recommended.

Keywords: Psychodermatology; Primary Psychiatric Disorders; Neurotic Excoriations; Acne Excoriee; Dermatitis Artefacta.

Introduction

Psychodermatology encompasses diseases that involve the complex interaction between the mind, the cutaneous nerve, the cutaneous immune system and their cutaneous manifestations. Mind-skin interactions may be any of the following: (a) primarily cutaneous disorders that can be substantially influenced by psychological factors, e.g. psoriasis, atopy, (b) primarily psychiatric disease (PPsD) presenting to dermatology health care professionals e.g. delusional infestation, body dysmorphic disorder (BDD), (c) psychiatric illness developing as a result of skin disease including depression, anxiety or both, and (d) disorders with concomitant skin and psychiatric abnormalities, e.g. alcoholism [1].

In this study, we included patients belonging to the second group, i.e. those with PPsD. PPsD are uncommon, the primary pathology being in the mind, and skin complaints being secondary and often self-inflicted [2]. Such patients, though their primary disorder is psychiatric, lack insight and rather present to a dermatologist who can play an important role; in suspicion of the disease, establishment of diagnosis and later in

management. Sometimes the diagnosis is easy and straight forward, but few PPsD may mimic cutaneous disorders and hence a high degree of clinical suspicion is required to arrive at a proper diagnosis.

Materials and Methods

An open, cross sectional, observational descriptive study was conducted, including all patients with some dermatologic manifestation of primary psychiatric disorder that presented to the skin out-patient department of a tertiary care hospital in western India., the patients were then referred to psychiatry department of the hospital for further evaluation and confirmation of the diagnosis as per The Diagnostic and Statistical Manual of Mental Disorders (DMS 5) [5] [that describes the symptoms for all mental disorders [6,7] and the criteria that must be met to receive a diagnosis of each disorder [8] including: Disorders of delusional beliefs : Delusional parasitosis [9], Obsessive and compulsive behavior : Body dysmorphic disorder, Prurigo simplex and nodularis, Lichen simplex chronicus, Neurotic excoriations [10], Acne Excoriee, Trichotillomania [11], Onychotillomania and Onychophagia, Factitious Skin Disease: Dermatitis artefacta, Dermatitis simulate [12], Psychogenic Pruritus, Deliberate Self harm: Deliberate self-harm with or without suicidal intent.

Possible primary dermatological cause for the presenting symptoms were excluded by appropriate investigations and histopathological confirmation. In our study, we documented the socio-demographic data, medical history, family history and dermatological examination of patients with primary psychiatric diseases presenting to our outpatient department over a 6 month period. Upon reference to psychiatrists, patient's willingness to consult the psychiatry physician was asked whether patients accepted the psychiatry referral willingly or unwillingly was noted.

Exclusion Criteria: Patients proven to have primary dermatosis, known chronic medical illness or systemic disorders, pregnant and lactating mothers and patients already on psychiatric medication.

Holistic approach was used in treatment - psychotherapy, psychotropic drugs, treatment of cutaneous manifestation and referral to a psychiatrist when required.

Results

Among 5460 new patients presenting to our outpatient department over a 6-month period, 50 patients (0.009%) were primarily psychiatric but presented with dermatologic symptoms. Among 50 patients studied, 39 were female and 11 males, showing female preponderance. During the study, of 1035 new patients attending the psychiatry out patient department 50 patient (0.0483%) were the proportion of PPsD.

Most of the cases were in 2nd to 5th decade and the mean age being 28 years. Neurotic excoriations was the most common PPsD (30% of the total patients), followed by psychogenic Pruritus (24%), lichen Simplex Chronicus (20%), acne Excoriee (10%), trichotillomania (6%), delusion of parasitosis (6%), onychophagia (2%), dermatitis artefacta (2%) (Table 1).

Most common underlying psychiatric disorder was obsessive and compulsive disorder (43%), followed by anxiety disorders (27%), major

Table 1: Distribution of Primary Psychiatric Disorder

PPsD	Males	Females	Total	Percentage
Neurotic Excoriations	1	14	15	30%
Psychogenic Pruritus	5	7	12	24%
Lichen Simplex Chronicus	3	7	10	20%
Acne Excoriee	0	5	5	10%
Trichotillomania	1	2	3	6%
Delusion of parasitosis	1	2	3	6%
Onychophagia	0	1	1	2%
Dermatitis artefacta	0	1	1	2%
Total	11	39	50	100%

Table 2: Distribution of Underlying Psychiatric Disorder

PPsD	Males	Females	Total	Percentage
Anxiety disorders	5	16	21	27%
Obsessive and compulsive disorder	3	30	33	43%
Major Depression	4	16	20	26%
Schizophrenia	1	0	1	1.3%
Substance Abuse	1	0	1	1.3%
Bipolar Disorder	0	1	1	1.3%

depression (26%), followed by schizophrenia, substance abuse, bipolar disorder, each being 1.3%. Stressor was identified in 60% of these patients. SSRIs were most commonly used medication along with habit reversal behavioral therapy, followed by Benzodiazepines and antipsychotics. (Table 2).

Out of 50 patients, 33 patients denied to be seen by the psychiatrist and the rest 17 required sustained counselling efforts by the dermatologists to make them aware of the need to be seen by psychiatrist. For the 33 patients who denied to be seen were examined within the dermatology department by the psychiatry resident physician upon request.

Discussion

As evident from our study, 39 females among total 50 patients, there is female preponderance (78%), which corroborates with other studies, this could be attributed to genuine higher prevalence of anxiety and mood disorders in females and also to the more cosmetic concern in females.

In our study, psychogenic excoriations were much more common in women than men, with 14 out of 15 patients being women which is in accordance with the study by Arnold LM et al. [15], however, the percentage of women in our study was substantially higher, being 93%. Neurotic excoriations were most commonly associated with underlying obsessive and compulsive behavior (68% of patients) which is not in agreement with Calikusu C et al. (Calikusu [16] C, 2003) who found that they were most commonly associated with Major Depression. Coexisting anxiety disorder was found in about 48% of these patients. Typically, skin picking disorders presents as lesions in all stages of development like presence of fresh excoriations and presence of scarring together in multiple numbers distributed over areas within reach of dominant hand as a response to stress, spending on average 3 hours per day picking/thinking about picking and/or resisting the urge to pick [17]. The prototype case described in our study is a 48 year old female patient with skin picking disorder [18], had an irresistible desire to itch since 3 months and she would itch frequently to such an extent that she would feel relief only when she started to bleed. Stressor being elder son had started living separately before 3 months, Husband was detected with liver problem 6 months back. On clinical examination, numerous lesions in all stages of development, excoriations, hyper pigmented scars, few chronic lesions showing atrophic scarring, post inflammatory hyperpigmentation, some lesions merging to form linear, hyper pigmented, coalescent areas. Diagnosis of Major Depression with skin picking disorder was made (Figure 1).

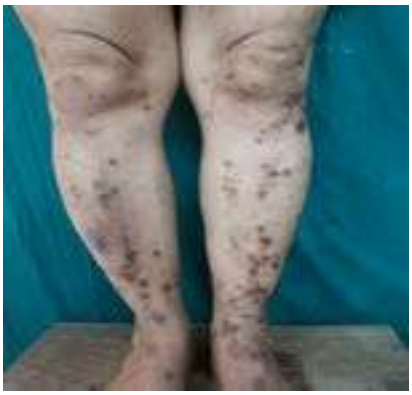

Fig. 1: Numerous lesions in all stages of development, excoriations, hyper pigmented scars, few chronic lesions showing atrophic scarring, post inflammatory hyperpigmentation, some lesions merging to form linear, hyper pigmented, coalescent areas in a 48 year old lady.

Acne Excoriee [17,18] was the second most common dermatologic manifestation of Anxiety disorder patients, with all 5(100%) patients being females, in our study, comorbid Major depression was found in 2 (40%) of these patients, one of these patients also had suicidal ideation, this is in accordance with the study by Arnold LM et al., who found that mood disorders were the most common underlying psychiatric disorder. Distribution of lesions is predominantly found around the hairline, forehead, pre-auricular cheek and chin

areas. Chronic lesions characteristically show white atrophic scar with peripheral hyperpigmentation. Lesions are picked as ritual, apparently as a response to itch or throbbing. The prototype case of acne excoriee in our study was a 24 year old, female patient with lesions over face since 1 year. Patient had a habit of picking and squeezing acne lesions after an episode of intense itching over face, itching had increased in proportion to the "tension" as she had married a boy since 1 year against her family wishes. Secondary to this, patient had persistent low mood, decreased sleep and appetite, frequent crying spells, and occasional death wish. On clinical examination, Excoriations, post inflammatory pigmentation and atrophic scarring mainly over forehead, pre-auricular cheek and chin. Diagnosis of Adjustment disorder with depressive mood with obsessive compulsive itching was made. (Figure 2).

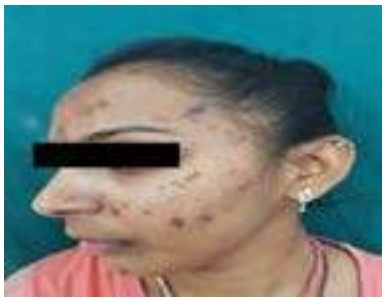

Fig. 2: Excoriations, post inflammatory pigmentation and atrophic scarring mainly over forehead, preauricular cheek and chin.

All 3 patients of trichotillomania, 2 females and 1 male, had underlying obsessive compulsive disorder, which shows higher association (100%) than the study by John Koo et al. [21], who found that it can also be associated with simple habit disorder, reaction to situational stress, mental retardation, depression and anxiety, as well as extremely rare cases of delusion. The difference can be attributed to the small sample size of our study. Hair pulling and plucking is the commonest from the scalp. Patients select an apparently abnormal hair by feel or texture and extend into adjacent area. Most pulled hair are from the vertex. On examination, there are often areas of hair loss together with areas of hair regrowth (stubble and longer hair) along with presence of occasional scarring due to habit of picking. The prototype case of trichotillomania in our study was a 57 year old patient presented with itching over scalp since 12 months, and had an intense desire to pull out her hair, only to provide temporary relief. On clinical examination, Extensive hair loss with preserved hair at bitemporal and occipital area of scalp, hair at different lengths. On trichoscopy, broken hair shafts, hairs at different lengths, traumatized hair shafts were seen Diagnosis of Trichotillomania [22] was made(Figure 3).

Fig. 3: Extensive hair loss with preserved hair at bitemporal and occipital area of scalp, hair at different lengths.

In our study, out of total 3 patients of Delusional Infestation, two were females and one male, which is in accordance with study by Jillian W Wong et al., who state female to male ratio as 2:1 [23]. Patients with delusional infestation have localized or generalized excoriations, erosions and sometimes ulceration, the skin changes are produced in an attempt to extricate the organism, usually with the fingernails, but occasionally sharps. It is important to rule out genuine infestation. The prototype case of Delusion of parasitosis described, was a 78 year old female patient who presented with skin lesions over face, neck, arms and legs since 1 year. On evaluation it was found that the patient believed firmly that she had insects coming out of her abdomen and crawling under her skin subsequent to which she would pick and pinch her skin to get rid of the insects. On clinical examination, multiple excoriations and erosions were present over face, anterior part of neck, extensor surface of upper and lower limbs, all sites within the reach of dominant hand. Diagnosis of Delusional Parasitosis was made (Figure 4).

Fig. 4: Multiple excoriations and erosionspresent over face, anterior part of neck, extensor surface of upper and lower limbs, all sites within the reach of dominant hand.

Dermatitis Artefacta [24], also known as factitial dermatitis, is a disorder of self-injurious behavior, all studies have shown female preponderance [23] varying from 20:1 to 4:1, with cutaneous lesions in order to fulfill an unconscious psychological need,

assuming the role of a sick patient. Cutaneous lesions are polymorphic, bizarre and mimic any of the known inflammatory reactions in the skin, the lesions are usually linear, angulated and assume patterns that do not conform to recognized skin disease morphology. In our study, there was only one patient of dermatitis artefacta being a 22 year old female patient who presented with itchy lesions over posterior aspect of left calf and thigh since 20 days. Patient did not know how the lesions had appeared and was giving vague history of their progression. On evaluation, patient denied for any worries or low mood but her mother gave history of recent inter-personal conflicts between herself and her husband and subsequent withdrawn behavior of the patient. On further probing the patient, it was found out that she had rubbed tincture of benzoin on her normal skin. On clinical examination, multiple pinpoint erythematous closely grouped rough, erythematous papules over the posterior aspect of left calf and thigh, few well defined ulceration, largest 3*2 mm with peripheral halo of erythema present. Diagnosis of Adjustment disorder with depressed mood, Dermatitis Artefacta was made. (Figure 5).

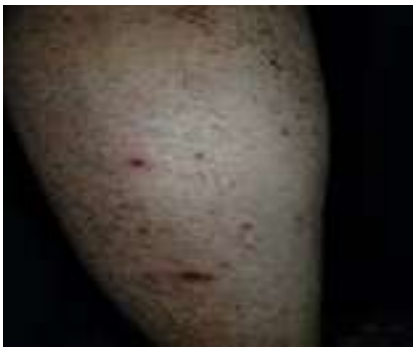

Fig. 5: Multiple pinpoint erythematous closely grouped hyperkeratotic papules over the posterior aspect of left calf and thigh, few well defined ulceration, largest 3*2 mm with peripheral halo of erythema.

Conclusion

It can be inferred that patients do not realize and even if they occasionally do or are made aware of their psychiatric disorder, they prefer consulting a dermatologist rather than a psychiatrist due to the prevailing stigma related to mental illness. The study stress on the need of in house psychiatry physician along with dermatologist in the same office even in the routine dermatology practice. Increased understanding of the complex needs of these patients is necessary for a dermatologist, the value of shared care with a psychologist and a psychiatrist is highly recommended.

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References

1. Anthony Bewley and Ruth E. Taylor Rook's Textbook of Dermatology, Ninth Edition. Edited by Christopher Griffiths, Jonathan Barker, Tanya Bleiker, Robert Chalmers and Daniel Creamer.
2. Yadav S, Narang T, Kumaran M S. Psychodermatology: A comprehensive review. Indian J Dermatol Venereol Leprol 2013;79:176-92
3. Domonkos AN. Pruritus, Cutaneous neuroses and Neurocutaneous dermatoses. Andrew's Disease of the skin, 6th ed. Philadelphia:WB Saunders C; 1971. p.61-76.
4. Holeyannavar M, Dhage AK. Psychodermatology: A Study of Co-Morbid Skin Disorders in Primary Psychiatric Conditions. Ann. Int. Med. Den. Res. 2017;3(1):DT01-DT03.
5. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, 5th edn. Washington, DC: American Psychiatric Association, 2014. www.dsm5.org (last accessed August 2015).
6. World Health Organization. The International Classification of Diseases 11th revision is due by 2017. http://www.who.int/classifications/icd/revision/en/ (last accessed August 2015).
7. World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders: Clinical Descriptions and Diagnostic Guidelines. Geneva: World Health Organization, 1992.
8. Koo J. Skin disorders. In: Kaplan HI, Saduck BJ, editors. Comprehensive textbook of psychiatry. 6th ed. Baltimore: Williams and Wilkins; 1995.
9. Bloch MR, Elliott M, Thompson H, Koran LM. Fluoxetine in pathologic skin-picking: Open-label and double-blind results. Psychosomatics 2001;42:314-9.

10 Keren M, Ron-Miara A, Feldman R, Tyano S. Some reflections on infancy-onset trichotillomania. Psychoanal Study Child 2006;61:254-72.

11. Koblenzer CS. Psychocutaneous disease. Orlando: Grune and Stratton; 1987. pp. 77–8. 117.

12. Korabel H, Dudek D, Jaworek A, Wojas-Pelc A. Psychodermatology: Psychological and psychiatrical aspects of aspects of dermatology. Przegl Lek. 2008;65:244–8. [PubMed]

13. M. Arnold, Lesley & Mcelroy, Susan & Mutasim, Diya & M. Dwight, Megan & L. Lamerson, Cindy & M. Morris, Emily. Characteristics of 34 Adults With Psychogenic Excoriation. The Journal of clinical psychiatry. 1998;59:509-14. 10.4088/JCP.v59n1003.

14. Calikusu C, Yücel B, Polat A, Baykal C. The relation of psychogenic excoriation with psychiatric disorders: A comparative study. Compr Psychiatry. 2003;44:256–61. [PubMed]

15. Koblenzer CS. Stress and the skin: Significance of emotional factors in dermatology. Stress Med. 1988;4:21–6.

16. Arnold LM. Phenomenology and therapeutic options for dermatotillomania. Expert Rev Neurother 2002;2:725-30.

17. Sneddon J, Sneddon I. Acne excoriee: A protective device. Clin Exp Dermatol. 1983;8:65–8. [PubMed]

18. Bach M, Bach D. Psychiatric and psychometric issues in acne excoriee. Psychother Psychosom. 1993;60:207–10. [PubMed]

19. Koo JYM, Lee CS. General approach to evaluating psychodermatological disorders. In: Koo JYM, Lee CS, eds. Psychocutaneous Medicine. New York: Marcel Dekker, Inc; 2003:1-29.

20. SwedoSE,RapoportJL.Annotation:Trichotillomania. J Child Psychol Psychiatry 1991;32:401-9.

21. Wong JW, Koo JY. Delusions of parasitosis. Indian J Dermatol 2013;58:49-52.

22. Consoli S. Dermatitis artefacta: A general review. Eur J Dermatol. 1995;5:5–11.

23. Fabisch W. Psychiatric aspects of dermatitis artefacta. Br J Dermatol. 1980;102:29–34.