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A study of dermatological disorders with primary psychiatric illness from South India

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ABSTRACT

Background: Dermatological disorders are frequent among patients with psychiatric illness. The interaction between skin and mind is complex. Pre-existing skin diseases may be modified in psychiatric illness due to self induced changes which may delay the diagnosis and treatment of skin diseases and result in complications. There are only few published studies about skin diseases in psychiatric patients from south India. We are undertaking this study to highlight the importance of dermatology consultation in psychiatric patients.

Methods: 200 patients with primary psychiatric disorders who accepted for the study were subjected to history taking and general examination. Detailed dermatological examination was carried out by visual inspection and clinical examination.

Results: Out of 200 patients, 65 were diagnosed with major depressive disorder, 42 patients were with bipolar disorder, 40 with schizophrenia, 30 with obsessive compulsion disorder, 23 with anxiety disorder. 153 (76.5%) patients had dermatological findings, in which 84 (55%) had infectious disease, 35 (22.9%) had parasitic infections, 26 (17%) had fungal infections, 15 (9.8%) had bacterial infections, 8 (5.23%) had viral infections. 56 (36.6%) had non-infectious skin findings, 22 (14.4%) had acne, 15 (9.8%) had pruritis, 12 (7.84%) had eczema, 5 (3.3%) had psoriasis and 2 (1.3%) had vitiligo. 13 (8.4%) patients had psychodermatological problems, 10 (6.53%) had neurotic excoriation, 2 (1.3%) had delusion of parasitosis and 1 (0.6%) had trichotillomania.

Conclusions: This study implies that there is a definite association of dermatology and psychiatry.

Keywords: Psychodermatology, Skin disorders, Psychiatric patients

INTRODUCTION

Central nervous system and skin evolves together alongside in fetus and stays interconnected always.¹ Many psychiatric illnesses are linked with dermatological manifestations.² Many factors such as stress, anxiety which is mediated by the hypothalamus pituitary axis contribute to the development of dermatosis by releasing neuropeptides and neurohormones which should be treated properly, so there is always a connection between dermatology and psychiatry.³ Rates of psychiatric

patients having skin disease differ with authors, but they all had accepted the fact that skin and psychiatry go hand in hand and management requires a dual approach, so they created a new subspecialty known psychodermatology.4 Certain primary psychiatric conditions itself has skin manifestations such as delusion of parasitosis, trichotillomania, acne excoria.⁵ Various dermatosis such as psoriasis, atopic dermatitis, acne were caused and aggravated by stress.⁶ Usually dermatologists forget to rule out the psychological history of their patient's skin disorders, and psychiatric patients try to

cover their psychological condition and seek the help of dermatologists for their skin manifestations.⁷ However there are very little study done to find the incidence of dermatosis in patients with primary psychiatric disorder and to highlight the importance of dermatology consultation in psychiatric patients.

METHODS

In this cross-sectional study, patients attending psychiatry OPD of Meenakshi institute of medical sciences and research hospital, Kancheepuram, were selected after taking informed consent. The sample size is 200 taken over a period of 6 months from March to August 2019. A detailed history was taken; complete dermatological examination was carried out by visual inspection and clinical examination. Underlying psychiatric disorders were confirmed with the help of psychiatrists. Inclusion criteria were psychiatric patients of age 10 to 70; both male and female patients. Exclusion criteria were patients not willing for the study.

RESULTS

Out of 200 people, 110 (55%) were female and 90 (45%) were male (Table 1). The majority of patients were in the age group 30-40 (Table 2). Out of 200 patients, 65 were diagnosed with major depressive disorder, 42 with bipolar disorder, 40 with schizophrenia, 30 with obsessive compulsion disorder and 23 with an anxiety disorder (Table 3). Out of 153 (76.5%) patients had dermatological findings (Table 4) in which 84 (55%) had infectious disease; 35 (22.9%) had parasitic infections, 26 (17%) had fungal infections, 15 (9.8%) had bacterial infections and 8 (5.23%) had viral infections. 56 (36.6%) of patients had non-infectious skin findings; 22 (14.4%) had acne, 15 (9.8%) had pruritis, 12 (7.84%) had eczema, 5 (3.3%) had psoriasis and 2 (1.3%) had vitiligo. 13 (8.4%) patients had psychodermatological problems; 10 (6.53%) had neurotic excoriation, 2 (1.3%) had delusion of parasitosis and 1 (0.6%) had trichotillomania (Table 5 and Table 6).

Table 1: Sex distribution of study sample.

Sex	Number of patients
Female	110
Male	90

Table 2: Age distribution of patients under study.

Age (in years)	Number of patients
10-20	10
21-30	29
31-40	51
41-50	48
51-60	42
61-70	20

Table 3: Primary psychiatric patients under study.

Primary psychiatric condition	N (%)
Major depressive disorder	65 (32.5)
Bipolar disorder	42 (21)
schizophrenia	40 (20)
Obsessive compulsion disorder	30 (15)
Anxiety disorder	23 (11)

Table 4: Patients with skin findings in study (n=200).

Patient details	N
Patients having skin findings	153

Table 5: Patterns of dermatological findings.

Dermatological findings	N (%)
Infectious disease	84 (55)
Non infectious disease	56 (36.6)
Psychodermatological	13 (8.5)

Table 6: Skin lesions in primary psychiatric patients under study.

Dermatological findings	N (%)
Parasitic infections	35 (22.9)
Fungal infections	26 (17)
Acne	22 (14.4)
Bacterial infection	15 (9.8)
Pruritis	15 (9.8)
Eczema	12 (7.84)
Neurotic excoriations	10 (6.53)
Viral infections	8 (5.23)
Psoriasis	5 (3.3)
Vitiligo	2 (1.3)
Delusion of parasitosis	2 (1.3)
Trichotillomania	1 (0.6)

DISCUSSION

In current study, females patients were more compared to male patients and major depressive disorder (32.5%) was found to be the major primary psychiatric disease. 153 (76.5%) patients had dermatological manifestations, this prevalence correlates with the national study done by Moftah et al, in which 200 patients with primary psychiatry disorder were studied and dermatological manifestations were reported in 71.5% patients.⁸ In study conducted by Mookhoek et al with 90 patients, skin manifestations in 77% of patients were reported.⁹

In present study, infections were found to be the major dermatological manifestation, parasitic infections were found in 22.8% such as scabies, pediculosis, this may be due to poor self care, poor hygiene and negligence. Dermatophytic infections were found to be 16.9%, due to excessive sweating because of the humid climate in south India. Bacterial infections seen are secondary infections

caused by frequent scratching, furuncles. Viral infections such as herpes simplex, wart, molluscum contagiosum were seen in patients. This correlates with the study done by Kuruvilla et al, where 68.7% of psychiatric patients were reported with infectious skin disease.¹⁰

be due to antipsychotics, female Acne may preponderance, age factor, depression. papulosquamous disorder, psoriasis was seen in 3.2% of the patients, this may be due to stress factors. Mookhoek et al in his study observed 2.2% of patients having psoriasis. Pruritis was seen mostly in depressive patients, Gupta et al in his study gave a positive correlation between pruritis and depression.¹¹ Neurotic excoriations were seen in depressive and anxiety patients. Delusional parasitosis was seen mostly in schizophrenia patients. Seborrheic dermatitis and atopic dermatitis were the common eczemas seen in patients. Trichotillomania was seen mostly with obsessive compulsion disorder and depression patients.

CONCLUSION

This study shows the importance of dermatology consultation of psychiatric patients and a mutual approach of both dermatologists and psychiatrists is needed in treating psychiatric patients so that higher prevalence of skin manifestations in psychiatric patients may be lowered.

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Ethical approval: The study was approved by the

institutional ethics committee

REFERENCES

- Basavaraj KH, Navya MA, Rashmi R. Relevance of psychiatry in dermatology: present concepts. Indian J Psychiatry. 2010;52:270-5.
- 2. Koblenzer CS. Psychosomatic concepts in dermatology. Arch Dermatol. 1983;119:501-12.

- 3. Elenkov IJ, Chrousos GP. Stress systemorganization, physiology and immunoregulation. Neuroimmunomodulation. 2006;13:257-67.
- Koo JY, Lee CS. General approach to evaluating psychodermatological disorders. Psycocutaneous medicine. 2nd ed. Newyork, NY: Marcel Dekker; 2003: 1-29.
- 5. Savin JA, Cotterill JA. Psychocutaneous disorders. In: Champion RH, Burton JL, Ebling FJ. eds. Ebling textbook of dermatology. 5th ed. UK: Oxford, Blackwell scientific publications; 1992:2482-3.
- Seville RH. Psoriasis and stress. Br J Dermatol. 1977:97:297-302.
- 7. Savin JA, Cotterill JA. Psychocutaneous disorders. In: Champion RH, Burton JL, Ebling FJ, eds. Textbook of dermatology. 7th ed. UK: Oxford: Blackwell scientific publications; 2006:161.
- 8. Moftah NH, Kamel AM, Attia HM, El-Baz MZ, Abd El-Moty HM. Skin diseases in patients with primary psychiatric conditions: a hospital based study. J Epidemiol Glob Health. 2013;3:131-8.
- 9. Mookhoek EJ, De Kerkhof PC, Hovens JE, Brouwers JR, Loonen AJ. Skin disorders in chronic psychiatric illness. J Eur Acad Dermatol Venereol. 2010;24:1151-6.
- Kuruvila M, Gahalaut P, Zacharia A. A study of skin disorders in patients with primary psychiatric conditions. Indian J Dermatol Venereol Leprol. 2004;70:292-5.
- 11. Gupta MA, Gupta AK. Depression and suicidal ideation in dermatology patients with acne, alopecia areata,atopic dermatitis and psoriasis. Br Dermatol. 1998;139:846-50.

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