



## CONSULTATION LIAISON MEDICINE; INTERACTIONS BETWEEN SKIN &amp; MIND.

## Dermatology

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## ABSTRACT

Psycho dermatology addresses the interaction between mind and skin. Psychiatry is more focused on the 'internal' no visible disease and dermatology is focused on the 'external' visible disease. There exists a complex interplay between the two disciplines which needs to be understood to offer correct treatment. Psycho- dermatologic disorders fall into three categories: psycho-physiologic disorders, primary psychiatric disorders and secondary psychiatric disorders. Psycho-physiologic disorders (e.g. psoriasis and eczema) are associated with skin problems that are not directly connected to the mind but that react to emotional states, such as stress. Primary psychiatric disorders involve psychiatric conditions that result in self-induced cutaneous manifestations, such as trichotillomania and delusions of parasitosis. Secondary psychiatric disorders are associated with disfiguring skin disorders. The disfigurement results in psychological problems, such as decreased self-esteem, depression or social phobia. In more than one third of dermatology patients, effective managements of skin conditions involve consideration of associated psychological factors.

**Conclusion:** Increased understanding of bio psychological approaches and liaison among primary care physicians, psychiatrists, and dermatologist could be very useful and highly beneficial.

## KEYWORDS

Psycho cutaneous disorders, mind, skin, consultation-liaison psychiatry

## INTRODUCTION

Skin has a special place in psychiatry with its responsiveness to emotional stimuli and ability to express emotions such as anger, fear, shame and frustration, and by providing self-esteem, the skin plays an important role in the socialization process, which continues from childhood to adulthood.<sup>1</sup> The relationship between skin and the brain exists due to more than a fact, that the brain, as the center of psychological functions, and the skin, have the same ectodermal origin and are affected by the same hormones and neurotransmitters.<sup>2</sup> Psycho dermatology describes an interaction between dermatology and psychiatry and psychology. The incidence of psychiatric disorders among dermatological patients is estimated at about 30 to 60%.<sup>3</sup>

Earlier, there used to be just one Doctor in the area who would do everything from treating children to suturing wounds to delivering babies to holding hand of the dead. But now, with evolution of modern medicine, specialities and sub specialities have branched making Doctors deal with parts rather than a person as whole. While this enables the specialist to deliver targeted care, the body often does not follow these distinctions as such. So very often, a specialist in one subject might need to consult another specialist in another subject to provide complete relief to the patient. These interactions between specialities give rise to the concept of 'Consultation-Liaison Medicine'.

In this article, we try to highlight the interaction happening between the specialities of Psychological Medicine and Dermatological manifestations.

Psychological medicine broadly focuses on three areas, namely biological, psychological & sociological components of the individual. Dermatology focuses on the etio-pathogenesis and characteristic clinical manifestations of the presenting symptoms to provide the patient with a treatment option. Both specialities are notorious for long term treatment plans. Disorders presenting with manifestations in both dermatology and psychiatry can be termed as Dermato-Psychiatric disorders or Psycho-cutaneous disorders..

## Dermato-Psychiatric disorders can be classified in 3 types

1. Psycho-Physiologic disorders – Primary skin disorders such as eczema that are worsened by psychological distress
2. Primary Psychiatric disorders- Primarily Psychiatric disorders such as Trichotillomania with manifestations that involve dermatology
3. Secondary Psychiatric disorders- Those having severe dermatological disorders with psychiatric manifestations like depression, negative body image.

## MATERIALS &amp; METHOD

The study was carried out at a tertiary care hospital in urban setting. The subjects included in this study were patients visiting Psychiatry OPD who were referred to Dermatology and patients from Dermatology OPD who were referred for Psychiatric evaluation and those who were ready to participate in the study. Universal sampling method was used to enrol the patients. The data was collected over a period of 3 months from 01-Jan-2011 to 31-Mar-2011.

During the study, 109 patients were referred from dermatology to psychiatry and 47 patients were referred from psychiatry to dermatology. The Primary diagnosis and the diagnosis made by the referral doctor were noted, tabulated and analysed for correlations. Institutional ethical committee approval was obtained.

## RESULTS:

Table 1 illustrates that, Out of the total 109 patients, 76 (69.72%) patients were referred from dermatology to psychiatry OPD for further evaluation.

The mean age for males and females were observed to be 26.5 years and 31.1 years respectively. Males noticed these symptoms for a mean duration of 6.2 months and females for 10.5 months.

Dhat syndrome affects only males as it is a syndrome associated with perceived loss of semen and its co-relation with physical weakness.

Itching was a prominent symptom in 56 patients (Psychogenic itching 12 & Delusional parasitosis 44). Most of these patients were older and especially in females, 12 of 16 were post-menopausal. Vitiligo & Psoriasis, both carry stigma of visible skin lesions and these patients had mixed anxiety & depressive symptoms.

Body Dysmorphophobia is defined as perceived defects in appearance. It is often bordering on delusions and needs judicious use of medications and counselling. 60% females experiences body dysmorphophobia.

HIV phobia was commonly seen in persons with low educational status and usually in jobs involving travel. Of 15 male patients, 9 had sexual encounters but with barrier use. Remaining 6 had either fear of getting HIV through Injection, shaving or physical proximity with a HIV positive person. Only woman presenting with HIV phobia had suspicion of husband having extra marital relationship. All HIV phobia patients were offered HIV pre-test counselling and testing. Only 10 of them actually underwent testing.

Table 2 depicts that out of the total 47 patients, 33 (70.21%) were females with 19.2 years of mean age and 2.5 months of mean duration of symptoms.

Trichotillomania often leads to bald spots on scalp for which dermatological interventions are needed. 1 (50%) male out of 2 and 2 (33.33%) female out of 6 patient was having mental subnormal status.

Adverse drug reaction (ADR) most commonly seen was itching and fixed drug eruptions. All ADR subsided following stopping the offending agent. No serious ADR was observed in any patient.

Psychogenic excoriation patient were both suffering from schizophrenia.

Hyperpigmentation was seen on face in all patients except one who had it on trunk.

Hair loss was common side effect of sodium valproate and 10 patients had it of sufficient severity to warrant a visit to a dermatologist.

#### DISCUSSION:

In the present study, Dhat syndrome affects only male as it is a syndrome associated with perceived loss of semen and its co-relation with physical weakness. Dhikav et al<sup>1</sup> studied 30 patients with Dhat syndrome and found that the mean age of onset was 19 years, with mean duration of the illness being 11 months. Twenty out of 30 patients met the diagnostic criteria for depression. A majority of the cases were unmarried (64.2%) and educated till 5<sup>th</sup> standard or above. Ten patients (33.33%) were found to have a co-morbid problem of premature ejaculation and ten patients reported erectile dysfunction.

Bhatia and Malik<sup>5</sup> studied 93 patients with Dhat syndrome and found weakness (70.8%) to be the most common complaint, followed by fatigue, palpitation, sleeplessness, loss of interest, loss of concentration, depression and headache. Among the psychiatric problems, neurotic depression was found to be the most common followed by anxiety neurosis in 20.8%, major depressive psychosis in 6.3% and phobia in 2.1%. In 18.6% of the patients, there was associated suicidal tendency.

In our study Itching 56 patients (Psychogenic itching 12 & Delusional parasitosis 44) experienced itching. 12 of 16 females were postmenopausal. 37% to 71% of patients with psoriasis reported stress as an exacerbating factor.<sup>6-9</sup>

An experimental study found that a high level of psychological stress enhanced the subjects' ability to discriminate higher intensities of itch stimuli.<sup>10</sup>

Sreelatha Lakshmy et al<sup>11</sup> found an overall prevalence of depression of 78.9% in patients with psoriasis, of which 62.2% had moderate to moderately severe depression that would require psychiatric intervention. Kumar et al.<sup>12</sup> have reported a higher prevalence rate of 90%.

Arnold LM<sup>13</sup> et al in his study found that most of the women had excoriation at multiple sites and most frequently over the face with mean age at onset of 38 years with chronic course. All 34 subjects met criteria for at least 1 co-morbid psychiatric disorder, with a mood disorder the most common.

In our study 50% males and 33.33% females of compulsive hair pulling was having mental subnormal status. Schlosser S et al<sup>14</sup> in his study on compulsive hair pulling found that nearly two-thirds met the criteria for a major mental disorder (particularly anxiety and mood disorders), and more than one-half met the criteria for a personality disorder. Nearly three-quarters of first-degree relatives were reported to have a psychiatric disorder, and about 5% were reported to be hair pullers.

#### CONCLUSION:

The emerging links between dermatological and psychiatric disorders point to an exciting new sub speciality with connotations for further research and clarification about managing both simultaneously. These disorders require long term treatment as they relapse with change of bio-psycho-social milieu.

Use of bio-psycho-social model in understanding these interactions and improving liaison amongst primary care physicians, psychiatrist and dermatologists to improve shared care of these patients is highly recommended.

Also we need to start patient educations on the following line to minimize the relapse and to improve compliance.

**Conflict of interest-**None

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**Table no. 1: Patients referred from dermatology to psychiatry (n= 109)**

Sr. no.	Diagnosis	Male	Female	Total
1	Dhat Syndrome	19 (100)	0 (0)	19
2	Psychogenic Itching	8 (66.67)	4 (33.33)	12
3	Delusional Parasitosis	28 (63.64)	16 (36.36)	44
4	Vitiligo	1 (25)	3 (75)	4
5	Psoriasis	3 (33.33)	6 (66.67)	9
6	Body Dysmorphism	2 (40)	3 (60)	5
7	HIV Phobia	15 (93.75)	1 (6.25)	16
<b>Total</b>		<b>76 (69.72)</b>	<b>33 (30.28)</b>	<b>109</b>
<b>Mean Age</b>		26.5 (17.5-69)	31.1 (19.7-62.5)	
<b>Mean duration of symptoms</b>		6.2 months (2.3-9.4)	10.5 months (3.5-24.2)	
<b>No. of visits to dermatology OPD before referral</b>		2 (1-5)	3(1-5)	

\*no. in parenthesis represents percentage.

**Table No. 2: Patient referred from Psychiatry to Dermatology (n= 47)**

Sr. no.	Diagnosis	Male	Female	Total
1	Trichotillomania	2 (25)	6 (75)	8
2	Adverse Drug Reaction	7 (31.82)	15 (68.18)	22
3	Psychogenic Excoriation	2 (100)	0 (0)	2
4	Hyperpigmentation	1 (20)	4 (80)	5
5	Hair Loss	2 (20)	8 (80)	10
<b>Total</b>		<b>14 (29.79)</b>	<b>33 (70.21)</b>	<b>47</b>
<b>Mean Age</b>		17.4 (7.5-42)	19.2 (12.7-44.5)	
<b>Mean duration of symptoms</b>		3.4 months (1.3-8.4)	2.5 months (1.3-8.2)	
<b>No. of visits to dermatology OPD before referral</b>		2 (1-5)	3(1-5)	

\*no. in parenthesis represents percentage.

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