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PATIENTS PRESENTING WITH PAPULOSQUAMOUS DISORDERS TO THE DERMATOLOGY OUTPATIENT WITH THEIR CLINICAL PROFILE

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Abstract
Psoriasis is a common, chronic, and recurrent inflammatory disease characterized by heritability, phenotypic variability and possible association to psoriatic arthritis and metabolic syndrome. Psoriasis is considered as a hyperproliferative disorder, but this increased proliferation of keratino cytes is the result of a cascade of immunologic reactions driven by inflammatory mediator cells and cytokines. This was a descriptive cross-sectional study. A total of 210 successive cases, who attended the OPD with papulosquamous disorders were taken. Data was collected after obtaining a written informed consentfrom the patient. A detailed clinical history was taken and a complete examination of skin lesions wasdone. In this study comprising of 210 cases, 44.3% had psoriasis, 36.7% had lichen planus, 14.3% hadpityriasis rosea, 2.9% had lichen nitidus and 0.9% each had lichen striatus and pityrias is lichenoides chronica.

Keywords: Papulosquamous disorders, psoriasis, clinical profile

Introduction

Papulosquamous disorders are a heterogeneous group of disorders whose etiology primarily is unknown.They consist of a diverse group of inflammatory conditions of the skin characterized by an eruption that exhibit papule and squamous components. In Latin,papula mean spimple and squames means scales[1].
Psoriasis is a common, chronic, and recurrent inflammatory disease characterized by heritability, phenotypic variability and possible association to psoriatic arthritis and metabolic syndrome. Psoriasis is considered as a hyper proliferative disorder, but this increased proliferation of keratino cytes is the result of a cascade of immunologic reactions driven by inflammatory mediator cells and cytokines[2].

Lichen planus is a common, pruritic, inflammatory disease of the skin, mucous membranes, and hairfollicles. Patho physiologically, lichen planus is an immunologic reaction mediated by T cells. Lichen planus affects mainly the skin, but mucosal membranes and nails may also be involved. Intense pruritus is very common during the course of the disease, especially in the early, active phase[3].

Pityrias is rosea is an acute, self-limiting papulosquamous disorder of unknown etiology, with a

highly characteristic morphology and clinical course. It typically begins with a scalyery the matous patch or plaque known as the Herald patch, which precedes and heralds the onset of the widespread papulosquamous eruption in the classical 'fir tree' or 'Christmas tree' distribution. It is most likely a viral exanthema associated with reactivation of human herpesvirus 7 (HHV-7) and sometimes HHV-6.Itprimarily affects children and young adults and typically resolves spontaneously within 6-12weeks[4].

Pityriasisrubrapilaris (PRP)is a chronic papulosquamous disorder of unknown etiology. One hypothesis is that it might be related to an abnormal immune response to an antigenic trigger, especially streptococcal infections, although vaccinations or medications may also be involved. PRP is more often sporadic, but it may sometimes be inherited[5].

Lichennitidus is an idiopathic inflammatory dermatosis that has been speculated to be induced by allergens causing epidermal and dermal antigen-presenting cells to activate a cell-mediated response, leading to lymphocyte accumulation and development of typical inflammatory papules. It is typically characterized by spontaneous resolution in a few years[6].

Methodology

This was a descriptive cross-sectional study. A total of 210 successive cases, who attended the OPD with Papulosquamous disorders were taken. Data was collected after obtaining a written informed consent from the patient. A detailed clinical history was taken and a complete examination of skin lesions was done. Dermoscopic examination was done using dermlite3 with polarized view. Skin biopsy was done from the lesion and sent for histo pathological examination. Data was entered in proforma and analysed using simple statistical methods like percentage, proportion, ratio, etc. and Chi square test (wherever applicable).

Inclusion criteria

Patients more than 15 years presenting with papulosquamous disorders to the Dermatology Outpatient Department at Maheshwara Medical College and Hospital were included in the study

Exclusion criteria

- Patients younger than15years.
- Patients on topical therapy for more than 1 month and systemic therapy for more than 6months.
- Patients with infectious and neo plastic skin lesions.
- Patients whose lesions are secondarily infected.

Results

In this study, about 31.4% of patients comprised of 21-30 years age group which was highest followed by18.6% between 31 and 40 years and 16.2% who were from 15to20 years. There were 15.2% of cases in the age group of 41-50 years, 10% in the age group of 51-60 years, 8.1% in the age group of 61-70 years and0.5% in the age group of 71-80 years.

Table 1: Distribution of patients based on age

Age group (in years)	Numberofcases(n=210)	Percentage
15-20	34	16.2
21-30	66	31.4
31-40	39	18.6
41-50	32	15.2
51-60	21	10.0
61-70	17	8.1
71-80	1	0.5
Total	210	100.0

In this study, there were 121(57.6%) males and 89(42.4%) females, male to female ratio being 1.4:1.

Table 2: Distribution of patients based on sex

Sex	**Frequency(n=210)**	**Percent**
Males	121	47.6
Females	89	42.4
Total	210	100

In this study comprising of 210 cases,44.3% had psoriasis, 36.7% had lichenplanus,14.3%had pityriasis rosea,2.9% had lichennitidus and 0.9% each had lichenstriatus and pityrias is lichenoides chronica.

Table 3: Frequency of various papulosquamous diseases in this study

Disease	**Numberofcases(n=210)**	**Percentage**
Psoriasis	93	44.3
Lichenplanus	77	36.7
Pityriasisrosea	30	14.3
Lichennitidus	6	2.9
Lichenstriatus	2	0.9
Pityriasis lichenoides chronica	2	0.9
Total	210	100.0

In this study, itching was the most common complaint seen in 166 (79%) patients, followed by elevated skin lesion seen in 145 patients (69%).Third most common complaint was scaling which was present in 60 patients (28.6). Discolouration was chief complaint in 54 patients and rash in 39 patients which was least common complaint. Multiple presentations hence total not shown.

Table 4: Distribution of chief complaints in the patients

Chief complaint	**Number of cases**	**Percentage**
Itching	166	79.0
Rash	39	18.6
Elevated skin lesion	145	69.0
Discolouration	54	25.7
Scaling	60	28.6

In this study, 139 patients had the duration less than 3 months and 30 patients had duration between 3-6 months. Duration between 6 months-12 months was seen in 22 patients and 19 patients had disease more than one year.

Table 5: Distribution of duration of diseases

Duration	**Frequency(n=210)**	**Percentage**
Less than 3 months	139	66.2
3-6 months	30	14.3
6 months-1 year	22	10.5
1-2years	14	6.7
More than 2 years	5	2.3
Total	210	100.0

In this study, 84.7% patients did not have any aggravating and relieving factors whereas 10.9% patients had aggravation of the disease during winter. Aggravation during summer was seen in 1.4% of patients. Aggravation on sun exposure was 1.4% and at night was seen in 1.4%.

Table 6: Various factors causing aggravation of disease

Aggravating factor	Number of cases (n=210)	Percentage
None	178	84.7
Winter aggravation	23	10.9
Summer aggravation	3	1.4
Sun exposure	3	1.4
At night	3	1.4
Total	210	100.0

Discussion

In our study of 210 cases, males outnumbered females i.e., there were 121(47.6%) males and 89(42.4%) females. Higher percentage was seen between 21-30 years of age group in our study followed by age group between 31-40 years. Another study done by Nwako-Mohamadi *etal*.[7]observed median age more than 50 years.

In our study, psoriasis (44.3%) was the most common papulosquamous disorder followed by lichenplanus(36.7%), pityriasisrosea14.3%), lichennitidus(2.9%), lichenstriatus(0.9%) and pityrias is lichenoides chronic (0.9%) in decreasing order. Similar to our study ,psoriasis outnumbered other papulosquamous disorders in other studies too[7,8].

In our study, itching was the most common complaint seen in 166 (79%) patients, followed by elevated skin lesion seen in 145 patients(69%). Third most common complaint was scaling which was present in 60 patients 28.6%). Discolouration was chief complaint in 54 patients and rash in 39 patients which was least common complaint. Duration of disease was less than 3 months in 139(66.2%) patients and 30(14.3%) patients had duration between 3-6 months. Duration between 6 months-12 months was seen in 22 (10.2%) patients and 19(9.0%) patients had disease more than one year. Most common aggravating factor in our study was winter season (10.9%).Although 92.4% of patients did not have any systemic complaints, 3.3% of patients had arthralgia and 4.3% had fever. No study was available to compare above parameters. In our study, among psoriasis patients, 8.3% had Diabetesmellitus,6.5% had hypertension and 1% had cardiac related disease which is comparable to a study conducted by Mrityunjay Kumar Singh[9], in which diseases associated with psoriasis, were diabetes mellitus (2.43%),hypertension(4.35%),heartdisease(1.75%).

In our study, lesions were generalised in 93.8% of patients but localised in 6.1% of patients. Bilateral involvement was seen in 97.2% of cases whereas 2.8% patients had unilateral lesions. Multiple lesions were present in almost all patients except for 4patients who had single lesion. Distribution of cutaneous lesions were symmetrical in 37 patients and asymmetrical in 173 patients. Erythematous lesions were present in60.5% patients. Scaling was seen in 65.7% of patients. Induration was present in 28.6% of patients andhyperpigmentationseenin37.6% of patients. No studies were available to compare the above parameters[10].

Conclusion

The most common papulosquamous disorder in our study was psoriasis(44.3%), followed by lichenplanus(36.7%),pityriasisrosea(14.3%),lichennitidus(2.9%),lichenstatus(0.9%)andpityriasisliche noideschronica(0.9%).

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