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CLINICAL PROFILE OF PSORIASIS IN NORTH INDIA

T R Bedi

A prospective study of 530 patients of psoriasis drawn from northern parts of India revealed a male preponderance; 60% patients having onset before the age of 30 years; youngest age at onset being one week and the oldest 72 years. Family history was positive in 14% cases. Only 30% psoriatics showed clear cut worsening in winter months. Skin and scalp were the commonest sites; 54% had nail changes when first seen and in 8 patients involvement of nails was the only manifestation of psoriasis. Joint symptoms were present in 10% of cases but frank arthritis was seen in only 7 cases. The presence of joint affection was invariably associated with nail abnormalities. Psoriatic arthritis among the Indian patients is not only rare but shows a milder course as compared to the western countries.

Key Words : Psoriasis, Arthritis

Introduction

Psoriasis is a chronic disease with an unpredictable clinical course marked by relapses and remissions. Clinical expression is generally limited to the skin, nails and the joints.[1-4] The disease is known for its marked geographical variations.[5,6] Clinical profile of psoriasis as seen in 530 patients studied over a period of 5 years is presented herein.

Patients and Methods

530 psoriasis patients in this prospective study were drawn from northern parts of India including Delhi and areas around it, amongst 18924 skin outpatients seen during the period July 1989 to June 1994. Clinical data were recorded in detail. Routine blood and urine tests were done in all cases. Blood sugar, liver function tests, throat swab, anti-streptolysin titres and skin biopsies were performed when indicated. Clinically doubtful cases were not included in the registry. Nail biopsies were not performed on account of patients' unwillingness. Rheumatoid factor tests by latex fixation method were carried out in all patients with joint symptoms. The patients were advised to come for follow up at fortnightly or monthly intervals during the active phase of disease.

From Tirath Ram Shah Hospital,Delhi-54,India.

Address correspondence to : Dr T R Bedi, Clinical Research Centre, 250 Sector 19, Faridabad - 121 002.

Results

The prevalence of psoriasis among dermatology outpatients in this series works out to be 2.8%. Sex and age distribution is given in table I. Itching was complained by

Table I. Psoriasis-Clinical Profile

Male : Female = 2.4 :1

Duration	One Week - Over 30 yrs
Peak Ages	2 Weeks, 89 yrs
Onset Ages	1 Week, 72 yrs

Onset Before 30 yrs = 60%
Onset Berore 40 yrs = 86%
Onset Before 50 yrs = 95%

88% of patients. The family history was positive in 74 patients (14%) of whom 52 were first degree (parents, siblings), 12 second degree (grandparents, aunts, uncles) and 10 third degree (cousins etc) relatives. There were only two instances of conjugal psoriasis with both marital partners being simultaneously affected.

Seasonal variations

Seventy two percent patients showed

significant seasonal variations; 30% felt worse in winter, 16% worse in monsoon and 4% worse in early summer. Ten percent improved during winter and 28% had lesions persisting all round the year with erratic fluctuations.

Table II. Psoriasis-Nails

Pitting	50%
Partial Onycholysis	22%
Nail Plate Thickening	14%
Subungual Hyperkeratosis	10%
Nail Plate Discolouration	8%
Complete Onycholysis	2%
Leuconychia	1%
Ridging & Paronychia	1%

Type and Site of Lesions

Skin lesions in the form of erythematous scaly plaques (90%) with silvery scales were the commonest presentation. These were present on the trunk in 68%, limbs in 66%, scalp in 62%, face in 28%, palms and soles in 7% and the flexural sites in 2%. Of the patients with presenting lesions on the extremities only a third of them showed classical plaques on the extensors of elbows and knees. Next common type of lesion was the fissurring plaque seen over the palms and soles and the flexors in 8% cases. In one patient the lesions over the palms were bilateral, multiple, discrete pustular in nature on an erythematous background. Diffuse erythema and scaling were observed in 16 patients with psoriatic erythroderma, all of them had diffuse hair loss from the scalp. Guttate lesions were seen in 5 patients. Blood counts were raised in all, but ASLO titres were raised in only two. Throat swab in them did not reveal any pathogens. All five had repeated attacks of guttate lesions for several months and two of them developed plaques of psoriasis during follow up. Three other patients showed somewhat peculiar lesions resembling pityriasis rosea over the lower trunk and the buttocks and within a month all of them went on to develop typical plaques of psoriasis.

Table IV. Psoriasis-Age Profile

Age (yrs)	Number	Skin	Nails	Joints
- 10	19	19	9	0
11 - 20	54	52	14 (2)*	4 (1)*
21 - 30	194	190	106 (4)	6
31 - 40	127	125	70 (2)	10
41 - 50	88	88	52	16 (4)
51 -	48	48	32	19 (2)
	530	522	283 (8)*	55 (7)**

* Nail affection only manifestation in parantheses
** Mutilating arthritis in parantheses

Skin was the commonest site of affection (98%). The lesions at times were seen to be located only on the scalp (2%), palms & soles (2%) or the flexural sites (1%). Mucous membrane of glans penis showed glistening scaly lesions in 4 patients and diffuse greyish white scaling around the corona in one patient.

Nail Abnormalities

Nail changes were seen in 54% of patients on their first visit. Other 15%

Table III. Psoriasis-Age Vs Sites

Age (yrs)	No.	Skin	Scalp	Palms & Soles	Flexures	Mucosae
- 10	19	19	2	4 (2)	0	0
11 - 20	54	52	18	14 (4)	0	0
21 - 30	194	190	106 (8)	6 (2)	0	2
31 - 40	127	125	96 (4)	6 (4)	2 (1)	2
41 - 50	88	88	74 (2)	2	7 (4)	0
51 -	48	48	32 (1)	2	1	0
	530	522	328 (15)	34 (12)	10 (5)	4

Table V. Psoriasis-Duration Vs Sites

Duration (Years)	No.	Nails	Joints S/S	Nails in Arthritic Patients
- 1	130	39 (4)	6	3
1 - 2	80	48 (2)	10 (1)	6 (1)
2 - 5	180	104 (2)	15	14
5 -10	100	60	10 (2)	8 (2)
10 -	40	32	14 (4)	14 (4)
	530	283 (8)*	55 (7)**	45 (7)

* Nails alone ** Arthropathy

Table VI. Psoriasis-Sites Vs Body Area

Duration (Years)	No.	Nails	Joints S/S	Nails in arthritic patients
- 25	264	90 (8)	16	10
26 - 50	130	80	10	9
51 - 75	68	55	4 (1)	4 (1)
76 - 95	52	42	9 (2)	6 (2)
100	16	16	16 (4)	16 (4)
	530	283	55 (7)	45 (7)

demonstrated nail changes on their subsequent visits. Pitting of the nail plate was the commonest finding (Table II). The most frequent site of affection was the finger nails. The correlation of nail changes with duration and the extent of skin lesions and presence or absence of arthritis is shown in tables IV to VI. All patients with arthritis showed some or the other nail abnormalities. Nail changes were seen to be the only manifestation of psoriasis in 8 patients, bilateral symmetric in 5 and asymmetric in 3. Diagnosis of nail psoriasis was made in view of nail changes being typical of psoriasis and development of skin lesions during follow up in some patients.

Joint Abnormalities

Fifty five of the 530 patients had symptoms pertaining to the joints, both bigger and smaller. Arthralgia was the only symptom in 48 of them and the remaining 7 had symptomatic mutilating arthropathy. Arthralgia was mostly confined to small joints of the hands and the larger joints of the extremities. Three of the 48 were positive for rheumatoid factor. Of the 7 patients with deforming arthritis, 5 showed involvement of both bigger joints of extremities and smaller proximal and middle interphalangeal joints of hands and feet, one showed bilateral symmetric involvement of sacroiliac joints and another showed symmetric involvement of distal interphalangeal joints characterstic of psoriasis. Latex fixation tests were negative in all 7 cases of frank arthropathy. Radiologically, the changes in 5 of them were indistinguishable from those seen in rheumatoid arthritis. Arthritis had developed in all 5, years after the onset of skin lesions of psoriasis.

In majority of patients, the skin and the nail lesions behaved independently of each other. Similarly, the nail and the joint changes worsened or improved irrespective of each other. Eleven patients, however demonstrated a distinct worsening of arthralgia and the skin lesions with the onset of winter season.

Associated Diseases

A number of skin and systemic diseases were observed to be present concomitantly in 40 patients with psoriasis (table VII).

Table VII. Psoriasis-Associated Diseases

Disease	No. of Patients
Diabetes Mellitus	14
Vitiligo	9
Hypertension	7
Alopecia AReata	5
Ichthyosis Vulgaris	3
Discoid Lupus	2

Discussion

Psoriasis is widely recognized to have a genetic basis with clinical expression depending upon a variety of factors of which

the climate, infections, stress and strain and the drugs are the best known.[1,5-7] The earlier reported prevalence of psoriasis in north India[5] of 0.8% in the seventies has now risen to 2.8% in the present series. Factors responsible for this rise are not clear. This study also reveals that the traditional winter worsening of psoriasis is appreciated in only about 30% patients.

Guttate psoriasis is perhaps a reaction pattern among psoriatic children related to streptococcal infection. In the 5 cases seen, none of them had any evidence of infection at least in the throat and the blood counts were raised in all 5, but ASLO titres were raised in only 2 of them. Two of the five patients initially responded favourably to erythromycin but subsequent relapses failed to show any good response to the antibiotic. Over the years they developed plaque type of psoriasis. None of the five patients with guttate lesions despite going on to plaque psoriasis exhibited any nail or joint abnormalities during the follow up of about 2 to 3 years.

Among the group of 55 patients with arthralgia, the significance of joint symptoms in 48 of them is not clear. Whether all or some of them will go on to develop arthritis in due course of time is to be seen. At least 3 of them with seropositivity appear to be at risk to develop rheumatoid arthritis. Of the seven with arthritis, 5 were clinically indistinguishable from rheumatoid arthritis, yet seronegative. The relation of seronegative arthritis to psoriasis is an interesting one. While a chance association can not be ruled out, the incidence of psoriasis is reported to be 5 times higher in patients with seronegative arthritis than those with seropositive rheumatoid arthritis in some western countries.[6,7] Furthermore, the incidence of arthritis among psoriatic patients in the western countries is extremely variable.[6] There also appears to be a clustering of psoriatic arthritis in family of patients with psoriasis.[9,10] Such data, to the best of my information, is not available from India. This study indicates that the occurrence of arthritis in north Indian psoriatic patients is uncommon. Truely speaking, only one of the 530 patients can be thought to be suffering from psoriatic arthropathy. In other six, psoriasis manifested in seronegative arthritis patients or vice versa. Whether psoriasis is more common in patients with seronegative arthritis in India is not known. It seems that psoriatic arthritis in Indian patients with psoriasis is a rare and relatively milder expression of disease as compared to psoriatic patients in the west.

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