

A STUDY OF 300 CASES OF PSORIASIS

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Summary

1. 300 cases of Psoriasis were studied for various laboratory findings.
2. The incidence was 1.5% of the total skin cases of the O. P. D. attendance.
3. The maximum incidence of 260 cases (86.67%) was seen in the age group of 11-50 years. The pediatric and geriatric age group showed a low incidence.
4. The ratio of male to female was 4 : 1.
5. Provocative or Precipitating factors like septic focus, trauma, seasonal variation, vaccinations, Asthma, Dysentery, Pregnancy, Emotional stress, etc., were found in some cases. Association of these factors may be coincidental or non-specific.
6. 6 (2%) of our cases gave history of similar disease in the family.
7. In our series, hypercalcaemia was noted in 20% of the cases while only 3.33% showed hypocalcaemia. Out of two of our Pustular Psoriasis one showed hypocalcaemia while other had normal serum calcium level.
8. Diabetes mellitus was detected in 16 of our cases (5.33%).
9. Hyperuricaemia was found in 60 of our cases (20%). Out of these 60 cases, two had Psoriatic arthropathy.
10. Serum cholesterol was high in 5% of cases, low in 15% of cases.

This study was undertaken with a view to confirm or contradict various laboratory findings reported by different authors in cases of Psoriasis and incidentally to learn about pathogenesis of the disease.

Psoriasis is a common, genetically determined disease of the skin consisting of well-defined, pink or dull red lesions surmounted by a characteristic silvery scaling. The lesions tend to become confluent and may persist indefinitely.

The disease is unpredictable and capricious in its course, but is usually chronic. Anomalous and typical forms are common and an association with arthritis is not infrequent.

In Indian Literature psoriasis has been reviewed and studied by Ambady¹, Sharma² and Sardarilal³.

300 cases of Psoriasis were studied in the Department of Dermatology and Venereology at the Nair Hospital, Bombay.

Writing about the ecological perspective or dermatological problems in India, Desai⁴ has included psoriasis in "the common troublesome

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three" (along with lichen planus and Bullous eruptions). In studies from Trivandrum¹ psoriasis accounts for 5.6% of the cases and takes 7.2% of the bed strength. However, the incidence reported from Indore by Sharma² is as low as 0.84% of all the skin cases. The corresponding figure from Punjab as reported by Sardari Lal³ is also low (1.25%).

TABLE 1
A study of 300 cases of Psoriasis

Total No. of Cases	300
Males	240 (80%)
Females	60 (20%)
Males : Females	4 : 1
M : F in total skin	
O. P. D. attendance	9 : 3
Incidence	1.5% of total skin cases in the O. P. D. attendance

In most studies of large group of population, males are more frequently affected than females⁵. In one U. K. study⁶ twice as many males were affected, but this is considered unusual for their country. However, in one of their hospital materials the sex ratio was about equal^{5,7}. In our study the ratio of male : female - 4:1.

TABLE 2
Age and Sex incidence.

	0-10 years	11-20 years	21-30 years	31-40 years	41-50 years	50 onwards	Total
Males	4	38	88	46	38	26	240
Females	5	18	20	9	3	5	60
Total	9	56	108	55	41	31	300

The first manifestation of Psoriasis occurred in 108 cases (36%) between the age of 21 and 30 years. Maximum number of cases (260 cases i.e. 86.67%) occurred between the age of 11 years and 50 years. Minimum number of cases occurred below 10 years and above 50 years.

Minimum age of onset was : 4 years
Maximum age of onset was : 70 years

The mean age of onset was 27.3 years in one large series⁸ but in males the onset was at an older age in another⁷. In our series (Table 2) mean age of onset was older in males compared to females. In childhood, Psoriasis is extremely rare before the age of 3 years and is more common in girls^{9,10}. In our series 5 cases occurred in female children and 4 in male children.

TABLE 3
Provocative or Precipitating factors and familial incidence

Septic focus					
Tonsillitis	Sinusitis	Gingivitis and Dental sepsis	Allergic rhinitis	Trauma	
18 (6%)	4 (1.33%)	24 (8%)	4 (1.33%)	4 (1.33%)	
Seasonal					
Winter	Summer	Vaccination	Asthma	Dysentery	Pregnancy
225 (75%)	75 (25%)	1 (0.33%)	3 (1%)	6 (2%)	1 case improved (0.33%)
Parturition		Emotional Factors		Genetic predisposition	
Same case worsened after parturition 1 (0.33%)		24 (8%)		6 (2%) cases had positive history of similar illness in family	

Clinical types seen in our series

	Cases	Percentage
Typical skin eruptions of Psoriasis	294	—
Erythrodermic Psoriasis :	4	—
Pustular Psoriasis	2	—
Nail involvement :	90	30
Arthropathy :	5	1.67

TABLE 4
Investigations done in 300 cases of Psoriasis

	Serum Calcium			Serum Cholesterol		
	Normal level	High level	Low level	Normal level	High level	Low level
No. of cases	230	60	10	240	15	45
Percentage	76.67	20	3.33	80	5	15
	Blood Sugar			Blood Uric acid		
	Normal level	High level	Low level	Normal level	High level	Low level
No. of cases	280	16	4	237	60	3
Percentage	93.34	5.33	1.33	79	20	1

Association of three factors may be coincidental or may be non-specific¹¹.

Ambady¹ reports familial incidence in two cases in a series of 45 cases (4.1%). He has also referred about the prevalence of this disease in families working with gold. In the catchment area of the Institute under study a sizable number of gold-smiths reside. However, this finding could not be corroborated. Sharma et al² report family history in 13.33% of his cases. Sardari Lal³ found family history in 3% of the cases in a series of 25 cases

Table 4 shows high level of serum calcium in 60 cases (20%) while low level in 3.33% and normal level in the remaining cases. Rook et al¹¹ mentioned that hypocalcaemia is most often seen in Pustular Psoriasis.

Serum cholesterol was high in 5% of cases, low in 15% of cases.

According to Verma¹² the mean of serum cholesterol level in normal popu-

lation is 216.7 mg. per 100 ml. In psoriatics it is 191.5 mg. From Verma's figures¹² it appears that serum cholesterol level in psoriatics is less than in normal.

Diabetes was detected in 16 cases (5.33%) and hyperuricemia in 20%.

All the cases were treated by conventional line of treatment. Most of them responded equivocally. Some of them were treated with triamcinolone and methotrexate with immediate good results.

None of our patients developed malignancy during the period of observation spreading over several years.

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