Psoriasis

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PSORIASIS is a chronic, recurrent, inflammatory disease of the skin, of unknown aetiology. Contrary to common belief, especially among Western dermatologists, it is quite prevalent in the tropics. The reported percentages of its incidence in England, America and India are 5, 3 and 3 respectively. In India, its incidence varies from 2.8 to 3.5 percent in different places (LAHIRI-1956). In our clinic Psoriasis accounts for 5.6% of cases and takes up 7.2% of the bed strength of this department round the year. The following is a review of 45 cases of Psoriasis treated as inpatients in the Skin and Venereal Diseases Department of the Medical College Hospital, Trivandrum.

The sexes are believed to be affected equally, but in our series the ratio between males and females is 4:1. The disease is said to be uncommon in infancy and old age, the commonest age of onset being 5-15 years. In this series age of onset varied from 4 to 62 years with the highest incidence in the age group 20-40 years. Heredity is believed to be a factor in aetiology and familial incidence occurs in about 30 per cent of cases (LERUER-1940). The appearance of this disease at different ages in identical twins was observed by Mayr (1938). In this series only two cases showed familial incidence — one patient's father and another's sibling being affected. One of us, Dr. Ambady, has observed this disease prevalent in the families of people dealing in Gold or with Gold. It is truly said that "Psoriasis is the disease of healthy people". Most of our patients were well-nourished and free from any other disease except those with exfoliative dermatitis and arthritic complications. Age and sex incidence, duration and special clinical features of our patients are given in Table I.

Aberrant types: There were four cases of mixed type of Psoriasis, i.e., Psoriasis with seborrhoea. Here the lesions were on the seborrhoeic sites — presternal area, flexures, axillae, groins — and the scales were of the greasy type. These flexural lesions were considerably itchy.

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TABLE 1.

No.	Name.	Sex.	Age.	Duration in years.	Age at onset	Remarks.
1.	G.P.	M	38	3	35	
2.	S.N.	M	42	2	40	
3.	P.P.	M	42	2/12	42	
4.	A.	M	48	4	44	
5.	Poras.	M	28	3/12	28	
6.	P.K.	M	39	8	31	
7.	Suk.	M	16	3	13	Family history and
8.	R.K.P.	M	27	8	19	Seborrhoecic dermatitis
9.	Th.	F	24	1	23	
10.	In.	F	15	2	13	
11.	K.K.	M	40	2	38	Seb:Der. and Scabies
12.	A.K.	F	19	4-6/12	14-6/12	Seb: Dermatitis
13.	P.J.	M	35	1	34	Diabetes
14.	P.P.	M	43	8	35	
15.	B.	M	28	2	26	
16.	V.P.	M	40	6	34	Malnutrition.
17.	K.	M	35	2	33	
18.	Th.	F	21	6/12	20-6/12	
19.	C.P.	M	66	4	62	
20.	K.	M	32	1	31	
21.	I.	F	14	10	4	
22.	N.R.	M	35	4/12	35	
23.	Ind.	M	30	6	24	
24.	K.N.	M	49	5	44	
25.	R.N.	F	11	3/12	11	
26.	M.S.R.	M	58	3	55	
27.	A.R.	M	25	4	21	
28.	K.K.K.	M	24	8	16	
29.	P.N.	M	26	6/12	25-6/12	
30.	Bh.	M	28	6/12	27-6/12	
31.	K.N.	M	57	6	51	Exfoliative Dermat.
32.	Subh.	F	30	10	20	Arthritis-Family history
33.	N.	M	30	2	28	
34.	R.N.	M	32	1	31	Otitis externa
35.	S.	F	21	3/12	21	
36.	D.N.	M	45	6/12	44-6/12	Scabies
37.	R.	M	60	5/12	60	Pustular psoriasis.
38.	Sar.	F	27	2-6/12	24-6/12	
39.	Math.	M	55	3	52	Scabies
40.	R.N.	M	17	6/12	16-6/12	
41.	Abr.	M	52	2	50	Exfoliative Dermat.
42.	S.K.	M	31	2	29	
43.	Sir.	M	28	3	25	Illnourished
44.	Nan.	M	48	12	36	
45.	M	M	29	6/12	28-6/12	Seborrhoeic Dermat.

Three cases were associated with scabies. Psoriatic lesions in these cases were due to Kobner's phenomenon as a result of the severe itching of scabies.

Exfoliative dermatitics was seen in two cases. Both these patients had undergone "native" treatment and the exfoliation was probably the result of metallic poisoning.

One case of Psoriasis arthropathica was observed who had recurrent Psoriasis of ten years' duration with arthritis since one year. The arthritis was of the rheumatoid type except that the distal interphalangeal joints also were affected. It is interesting to note that there was marked Psoriasis of the nails in this case, as nails are said to be affected in 80% of arthropathic psoriasis. Arthritis has a closer correlation with the lesion of the nails than cutaneous lesions as they usually show remissions and relapses together.

There was one case of pustular Psoriasis in an ill-nourished man of 60 years. This was resistant to ordinary lines of treatment. There was one case of Psoriasis of the external auditory meatus. One case had diabetes. Two patients were ill-nourished. There were no cases of acute Psoriasis or involvement of the mucous membranes.

TREATMENT

Drugs that have been used in the treatment of Psoriasis are legion. Most of these are merely palliative "the multiplicity of remedies being mute evidence of their inefficiency". This has earned for Psoriasis the distinction of being "the disease of specialistic frustration".

Arsenic in the form of Fowler's solution or Sodium cacodylate as a time-honoured remedy, now obsolete. The toxic effects of arsenic with the risk of exfoliative dermatitis and carcinoma following its long term use does not any more justify its employment in the treatment of Psoriasis. Salicylate of sodium and Iodide of Potash as internal remedies are perhaps only of historical importance.

VITAMINS

All the known vitamins from A to E have been tried with varying results. None has shown any specific action except perhaps the B-complex factors and Vitamin D. Riboflavin in doses of 10 mg. 1.M. daily for 20 days have been found to be a very effective adjuvant to modi-

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fied Goeckerman's regime. Folic acid and vitamin B_{12} have not shown any special value in treatment.

Of the various hormones that have been tried in the treatment of Psoriasis, thyroid and the cortical steroids deserve special mention. Recently we have found male hormones to be very useful in the treatment of recalcitrant Psoriasis.

Thyroid causes regression of lesions, but the disadvantages and risks attendant on its long-term use are by no means compensated by

a result which can be obtained by many other less dangerous remedies. We have tried it in two resistant cases, with encouraging results.

Cortisone and A.C.T.H. have only a limited place in the treatment of such a chronic disease as Psoriasis. They are useful in quietening an actute attack or an exacerbation and may be valuable in cases of exfoliative dermatitis. They may also be valuable in arthropathic Psoriasis, but the one case in this series did not require its use.

Androgens are being tried in dozes of 5 mgms. 1.M. daily or on alterenate days in cases resistant to ordinary forms of treatment. Good results were observed, the resistant patches showing signs of resolution usually after the fifth injection. Details will be reported elsewhere. Androgens may prove useful in shortening the duration of therapy, especially in recalcitrant cases. We are not in a position at present to evaluate its long term therapeutic efficacy nor is the modus operandi clear.

Autohaemotherapy has proved ineffective in our hands in four patients in the series. Nonspecific protein therapy by way of intravenous injections of TAB vaccine has been found useful in resolving resistant Psoriatic patches. One million organisms are given to start with and the dose is increased by one million every fourth day till ten millions are given. The unpleasant fever and rigor make it unsuitable as a routine therapeutic procedure.

Diet: Apart from advising a low fat diet, no other dietary restrictions were imposed.

External treatment: Dithrinol has proved its worth as the most effective local application in the treatment of Psoriasis. It was given in all cases where there was no contra-indication, in strengths of 0.5 to 1% of Lassar's paste for external application. Patients were instructed to rub in the ointment twice daily — the first application being made immediately after exposure to ultra-violet rays. Dithrinol was not used on the face or scalp or in cases of exfoliative dermatitis or in debilated individuals. The only untoward effects of Dithrinol noticed were a severe allergic reaction in a man and slight general puffiness in a girl. In both, withdrawal of the drug controlled the symptoms. For the face and scalp Ung. hydrargyrum ammoniata dil. was used. One patient, a boy of 13 years, developed severe gingivitis and other signs suggestive of mercury poisoning. Recovery followed withdrawal of the drug.

Ultraviolet Radiations: Ultraviolet rays in suberythematous doses preceding the local applications were found to be beneficial. It was given in all cases for periods of 3-4 weeks.

Patients in this series were treated by one of two methods—(1) modified Gockerman's regime ,and (2) modified Castenado's regime.

Modified Goeckerman's regime. (Table II): Here, the patients were treated with suberythematous dozes of Ultra-violet Rays, local dithrinol and mercury ointments and intramuscular injections of 10 mgms. of Riboflavin daily for 20 days. Eight patients treated under this sche-

TABLE II. MODIFIED GOECKERMAN'S REGIME.

Treatment Schedule	No.	Duration of disease	Duration of therapy	Result.
		(years)	(days)	
Riboflavin 10 mgm. I.M. daily for 20 days, U.V.R. therapy, local Dithranol and Ung. Hydrag. Ammon. Dil.	1	8	30	Discharged—All lesions resolved.
	2	8	30	—do—
	3	2	21	—do—
	4	2	21	—do—
	5	6/12	15	—do—
	6	1	20	—do—
	7	10	36	—do— relapsed after 2 months.
	8	6/12	28	—do— relapsed after 8 months.
Above regime + Autohaemotherapy.	9	2/12	30	—do—
	10	8	48	—do—
	11	3	34	—do— Developed signs of mercury poisoning.
	12	2	25	—do— relapsed after 3 months.
Above regime + general supportive measure —Liver extract, B-Complex.	13	6	90	—do— (60 year old ill-nourished debilitated man with severe avitaminosis.
Above regime + Cortisone 25 mg. I.M. daily for 10 days.	14	4	24	—do—
	15	4	38	—do— Relapsed after one year.
Above regime + A.C.T.H. 25 mg. I.M. daily for 10 days.	16	3/12	34	—do— Relapsed after 6 months.
Above regime + Folic Acid.	17	1	30	Discharged—All lesions resolved.
	18	2	30	—do—
	19	4-6/12	35	—do—
	20	2	60	—do— developed allergic dermatitis and angioneur otic odema after Diathranol.
	21	1	Incomplete	Psoriasis with diabetes.
Above regime + TAB.	22	4	21	Was resistant to routine treatment, but showed signs of resolution even after 2 injections of T.A.B.
	23	8	17	Discharged all lesions resolved. Relapsed after 2 months.
Above regime + Vitamin B-12.	24	2	30	Discharged—All lesions resolved
	25	4	25	—do—
	26	6/12	21	—do—

dule were discharged after complete resolution of the lesions. The period of therapy extended from 15 to 36 days with an average of 3-4 weeks. Cases of longer duration required longer periods of treatment. Of these one case relapsed after two months and another after 8 months.

Autohaemotherapy was supplemented in four cases. This did not in any way reduce the course of treatment and did not prevent relapse. Two of the four relapsed, one after 3 months and the other after 6 months.

In one case where the patient's general condition was very poor with severe avitaminosis, supportive measures with Liver Extract and B-Complex were given and the disease took about 3 months for complete resolution.

Two cases where supplementary cortisone therapy was tried did not show any increase in therapeutic efficacy. One of these relapsed after a year. The only case who was given A.C.T.H. also relapsed after 6 months.

Addition of Folic acid in 5 cases and Vitamin B_{12} in three cases also did not shorten the duration of treatment. However, none of these has reported with relapse. Intravenous injection of TAB vaccine was used with benefit in two cases with recalcitrant lesions, but one of these relapsed after 2 months.

Modified Castenado's regime (Table III): In 1954, the British Medical Journal wrote in its Editorial on Psoriasis that "no dermatologist would expect to clear up the eruption with systemic treatment alone". In 1955, Carlos A. Castenado of the University of Havana, reported the first successful therapy of Psoriasis by systemic treatment alone. He treated 16 patients with extensive chronic Psoriasis with Vitamin D_2 (Calciferol) 1,200,000 units a week for the first week and then 600,000 units per week, Magnesium sulphate 10% solution 5 cc. intravenously thrice a week and Niacin 25 mg. t.d.s. The rationale of this treatment was to counteract the effect of Cysteine (shown experimentally to have worsened the eruption) and also to produce vasodilatation. He did not use any local therapy. In the 16 patients treated by this regime total clearing occurred in 9, more than 50% improvement in 3, and no improvement in four.

We have used this new method of therapy supplemented with local applications of Dithrinol and Mercury ointment after Ultraviolet exposures. A number of outpatients and inpatients have been treated this way with encouraging results. In this series, 19 fresh cases and 7 cases who relapsed after modified Goeckerman's regime have been treated by this method. Lesions were totally cleared in all cases. In one case resistant to treatment supplementary Hormone (Testosterone Propionate) therapy was given. The duration of treatment varied from 15 to 62 days. Longer courses were needed only in complicated cases. On an average, duration of therapy was 3-4 weeks. There were no untoward effects except a few pyrexial reactions after intravenous