PATTERN OF SKIN DISEASES IN ARMED FORCES IN PUNE REGION

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ABSTRACT

A total of 8123 Armed Forces personnel attended dermatological OPD from Jan 1989 to Dec 1994. On analysing the record it is found that 2953 (36.3%) cases had infective dermatosis and 5170 (63.7%) cases had non-infective dermatosis. Common infective dermatosis included fungal infections (17.2%), viral infections (7.7%), bacterial infections (3.6%) and arthropode infestations (7.8%). Common non-infective dermatosis included papulosquamous disorders (13.5%), pigmentary disorders (13.4%), eczemas (11.1%), acne (8.7%), alopecia (6.1%), urticaria (4.2%) and drug eruptions (1.9%).

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KEYWORDS : Armed Forces personnel; Infective dermatosis; Non-infective dermatosis.

Introduction

The pattern of skin diseases is determined to a significant degree by ecological factors [1]. It is particularly so in India where customs, religions, climate, social status and occupation are so varied in different areas. Armed Forces personnel are drawn from all over the country having different religion, educational and socio-economic background. Their working place varies from extreme cold climate at high altitude to extreme hot climate of desert. The occupation of Armed Forces together with special dress greatly influences the pattern of skin diseases in them. Number of workers [2-7] have reported pattern of skin diseases in civilians from different part of country. In this study an attempt has been made to determine the pattern of skin diseases in Armed Forces personnel in Pune region.

Material and Methods

The study is based on the records of 8123 new dermatological cases of Armed Forces personnel seen at out-patient department of dermatology at Command Hospital (SC) Pune over a 6 year period from Jan 1989 to Dec 1994. Families of Armed Forces personnel and civilians were excluded from the study. Cases of leprosy, sexually transmitted diseases and HIV infection were also excluded from the study. A detailed history was recorded followed by general, physical, systemic and dermatological examinations. All the relevant investigations required for confirming the diagnosis were done and recorded. The record of all new dermatological cases was compiled and analysed.

Results

The observations are recorded in Tables 1-2. A total of 8123 new cases (Armed Forces personnel) attended skin OPD from Jan

1989 to Dec 1994. Average yearly OPD attendance of above cases were 1354. Out of total 8123 cases, infective dermatosis accounted for 2953 (36.3%) and non-infective dermatosis 5170 (63.7%) cases. Fungal infection was the commonest infective dermatosis seen in 1399 (17.2%) followed by parasitic infestation in 630 (7.8%), viral infection in 629 (7.7%) and pyoderma in 295 (3.6%) cases. Among non-infective dermatosis, papulosquamous disorders (Psoriasis, lichen planus and others) were commonest accounting for 1094 (13.5%) cases followed by pigmentary disorders 1087 (13.4%), eczemas 898 (11.1%), acne 714 (8.7%), alopecia 496 (6.1%), urticaria 338 (4.2%) and drug eruptions 153 (1.9%). Remaining 390 (4.8%) cases constituted miscellaneous skin diseases and were less common.

Discussion

The incidence and pattern of skin diseases vary from country to country and in different parts within same country [1]. In our study incidence of infective skin disease was 36.3 per cent which was lower than the study of Mehta [2] at Bombay (40.1%). Behl et al [6] reported very high (85.2%) incidence of infective dermatosis in rural survey and low (26.2%) at skin institute Delhi. The variations in the incidence of infective dermatosis in these studies are largely due to the variation in the socio-economic status of the people. The lower incidence of infective dermatosis in our study is possibly because of better health care and hygiene of the troops. The fungal infection among infective group was however highest in our study (17.3%) as compared to other studies (Table 3). This is possibly because of prolonged wearing of occlusive foot wear and owing to nature of duty and training schedule.

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TABLE 1
Year wise incidence of different types of skin diseases

Type of skin diseases	Number						Total	Percent
	1989	1990	1991	1992	1993	1994		
<i>Infective</i>								
Fungal	223	264	243	192	265	212	1399	17.2
Arthropod	120	122	110	98	95	85	630	7.8
Viral	106	104	115	110	94	100	629	7.7
Pyoderma	22	48	54	62	68	41	295	3.6
Total	471	538	522	462	522	438	2953	36.3
<i>Non-infective</i>								
Papulo-squamous	193	182	194	183	172	170	1094	13.5
Pigmentary	183	167	202	188	177	170	1087	13.4
Eczemas	144	147	149	135	156	167	898	11.1
Acne	96	108	140	125	120	125	714	8.7
Alopecia	78	84	89	85	90	70	496	6.1
Urticaria	45	66	60	50	65	52	338	4.2
Drug eruptions	25	30	22	24	29	23	153	1.9
Misc	79	60	43	81	71	56	390	4.8
Total	843	844	899	871	880	833	5170	63.7
Total	1314	1382	1421	1333	1402	1271	8123	100

TABLE 2
Pattern of skin diseases in different studies at different parts of India

Type of skin diseases	Incidence as observed by different workers					Present study
	Mehta Mumbai	Behl et al Delhi	Gupta et al Lucknow	Dayal Gupta Jhansi	Behl et al Rural	
<i>Infective</i>						
Fungal	3.2	9.7	9.1	12.8	14.8	17.2
Pyoderma	10.4	3.0	28.6	10.7	29.7	3.6
Viral	7.7	3.3	—	2.3	—	7.7
Arthropod	18.8	7.3	30.8	14.6	40.7	7.8
Infective graunuloma	—	2.9	—	—	—	—
Total	40.1	26.2	68.5	40.4	85.2	36.3
<i>Non infective</i>						
Eczemas	10.8	28.1	6.7	16.2	2.2	11.1
Papulo- squamous	—	4.0	2.6	1.9	—	13.5
Pigmentary	1.9	9.5	1.3	5.5	1.6	13.4
Acne	—	5.6	7.0	1.9	6.5	8.7
Alopecia	—	1.6	—	—	—	6.1
Urticaria	—	—	0.5	—	—	4.2
Drug eruptions	3.6	—	—	—	—	1.9
Misc	43.6	25.0	13.4	34.1	4.5	4.8
Total	59.9	73.8	31.5	59.6	14.8	63.7

Incidence of non-infective dermatosis in our study was 63.7 per cent as compared to 59.9 per cent by

Mehta [2], 31.5 per cent by Gupta et al [3], 59.6 per cent by Dayal and Gupta [5]. This higher incidence of non-infective dermatosis in our study is probably due to regular medical check up and greater awareness of skin disorders among the troops. Similarly high incidence of non-infective dermatosis was also found by Behl et al [6] among patients attending skin institute at Delhi who are usually from well to do families and urban back-ground. Among the non-infective dermatosis papulosquamous disorders (psoriasis, lichen planus and others) were commonest (13.5%) followed by pigmentary disorders (13.4%), eczemas (11.1%) and acne (8.7%). However in other studies eczema was commonest non-infective dermatosis [2,5,6].

The pattern of skin diseases in Armed Forces personnel include mainly the fungal infections among infective group and papulo-squamous diseases, pigmentary disorders and eczema among non-infective group. The less common skin diseases are viral and bacterial infections, acne, alopecia and urticaria. It needs to be emphasized that incidence of infective dermatosis can be reduced further by taking active prophylactic measures, health education, better personal hygiene and early treatment.

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