PATTERN OF DERMATOLOGICAL ADMISSIONS IN A REFERRAL SERVICE HOSPITAL

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ABSTRACT

The pattern of dermatological admissions based on retrospective study of 1578 Armed Forces personnel who were hospitalised during period of Jan 1984 to Dec 1994 at Command Hospital Southern Command, Pune were analysed. Average yearly admission was 144. Eczema was the most common skin disease requiring admission and accounted for 29.5 per cent cases followed by infections and infestations 25.5, papulo-squamous disorders 21.4, urticaria 4.2, connective tissue disorders 4.2, bullous disorders 2.8, and others 12.4 per cent.

MJAFI 1998; 54: 35-37

KEYWORDS: Armed forces personnel; Dermatological admission.

Introduction

Dermatological diseases are very common medical problem. Large community surveys conducted in USA and UK have revealed that 20 to 33 per cent of population had significant skin problem to justify medical attention [1]. Though, there is no study available on prevalence of skin diseases in India but, it is presumed to be much higher than developed countries because of hot and humid climate, poor socio-economic condition and different traditions and customs. In addition to above Armed Forces personnel have busy training and duty schedules. They have to wear uniform and occlusive foot wear for prolonged period, live as close community in barracks and are posted to different parts of country having different climatic conditions. Though, skin diseases seldom lead to mortality but, they do cause significant morbidity and loss of man hours. This is particularly so in Armed Forces where skin diseases may cause significant loss of man hours.

A number of workers have reported pattern of skin diseases from different areas in India [2-6]. However, these studies are based on out-patient attendance. In this study an attempt is made to determine pattern of hospital admission due to dermatological disorders in Armed Forces.

Material and Methods

The study is based on records of 1578 consecutive new cases of Armed Forces personnel admitted for skin diseases at Command Hospital Southern Command (CH (SC)), Pune during the period from Jan 1984 to Dec 1994. CH(SC) Pune is a large size

hospital and provides medical cover to the troops located in the southern region of the country. The cases which are admitted to the skin centre at CH(SC), Pune consists of those admitted directly from the local garrison as well as transfer cases from peripheral hospitals. Of the 1578 cases studied 994 were direct admission cases and 584 were transfer in cases from peripheral hospitals. The recording of detailed history, general physical, systemic and dermatological examination was done in all cases. All necessary investigations including skin biopsy required to confirm diagnosis was done in all cases. Readmissions and recategorisation cases were not included in the study. Cases of leprosy, sexually transmitted diseases and HIV infection were excluded from the study.

Results

The results of the study are shown in Table 1 and 2. A total of 1578 dermatological cases (Armed Forces personnel) were admitted during the period of 11 years at CH(SC) Pune. The mean yearly dermatological admission was 144.

Out of total 1578 cases, infective group accounted for 403 (25.5%) cases and non-infective group had 1175 (74.5%) cases (Table 1). Among infective group viral infection was commonest 142 (9.0%) followed by fungal infection 104 (6.6%) bacterial infection 80 (5%) and arthropod infestation, 79 (4.9%) cases (Table 2). Amongst noninfective group eczema was commonest affecting 466 (29.5%) cases, out of 466 cases of eczema 246 (15.6%) were contact dermatitis, and 197 (12.8%) were endogenous eczema (Table 2). Psoriasis was commonest papulo-squamous disorder involving 234 (14.8%) cases (Table 2). Other common skin disorders requiring admission were urticaria 66 (4.2%), bullous disorders 44 (2.7%) alopecia areata 38 (2.4%), drug eruption 26 (1.6%) and connective tissue disorder 42 (2.7%) cases (Table 1). Life threatening dermatosis including pemphigus; toxic epidermal necrolysis and Stevens Johnson Syndrome together constituted 62 (3.9%) cases.

Discussion

Study on pattern of dermatological admission is largely unknown as most of the work is done based on

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TABLE 1
Trends of admission in different dermatological disorders from 1984 to 1994

Type of skin disease	Number											Total	Percent
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994		
Infective diseases	38	47	38	44	35	48	29	41	41	25	27	403	25.5
Eczema	58	37	50	31	44	59	35	42	43	31	36	466	29.5
Papulosquamous disorder	30	41	31	28	28	25	26	23	29	34	39	334	21.4
Urticaria	3	10	10	3	13	4	6	7	5	2	3	66	4.2
Bullous disorder	8	4	5	4	6	6	4	4	1	1	1	44	2.8
Connective tissue disorder	—	4	2	7	5	5	6	4	4	3	2	42	2.7
Alopecia Areata	2	2	4	2	4	6	5	3	3	5	2	38	2.4
Miscellaneous	19	18	26	12	23	17	20	12	8	16	4	185	11.5
Total	158	163	166	131	158	170	131	136	134	117	114	1578	100

TABLE 2
Types of common skin diseases in hospitalised patients

Type of skin disease	Number	Percent
A. Infective		
a. Viral	142	9.0
b. Fungal	104	6.6
c. Bacterial	80	5.0
d. Arthropod	77	4.9
B. Non-infective		
1. Eczémas		
a. Contact dermatitis	246	15.6
b. Endogenous	220	13.9
2. Papulosquamous		
a. Psoriasis	209	13.3
b. Lichen planus	29	1.8
c. Pityriasis rosea	33	2.1
d. Others	63	4.0
3. Urticaria	66	4.2
4. Bullous disorders	44	2.8
5. Connective tissue disorders	42	2.7
6. Alopecia areata	38	2.4
7. Drug eruptions	26	1.6
8. Corn and callosities	20	1.3
9. Miscellaneous	139	8.8
Total	1578	100

out-patient attendance [2-7]. In a study by Falango et al [8] about 0.93 per cent of cases admitted in hospital for other than dermatological diseases required dermatological consultation of which infective group were 21.4 per cent as against 25.5 per cent cases in our study. Behl et al [6] have also reported incidence of infective disorder in 26.18 per cent and non-infective disorder in 73.82 per cent cases attending skin institute at Delhi. These figures are comparable with that of our study. However, in most of other studies done by different Indian workers in different parts of country the infections and infestations have been quite high as compared to non-infective group. The incidence of in-

fection was found to be 38 per cent by Mehta [2], 68.1 per cent by Gupta et al [3] and 43.2 per cent by Dayal and Gupta [5] as compared to our study where infective group comprised of 25.5 per cent. This lower incidence of infective dermatosis in Armed Forces personnel may be because of better personal hygiene and living condition as well as early out-patient treatment. The incidence of eczema was quite high (29.5%) in our cases as compared to other studies. Eczema has been reported in 10.8 per cent cases by Mehta [2], 6.9 per cent by Gupta et al [3] and 16.2 per cent by Dayal and Gupta [5]. The higher incidence of eczema especially contact dermatitis in our group can be attributed to exposure of Armed Forces personnel to different physical, chemical and biological agents as part of their training and job.

Among papulosquamous disease, psoriasis accounted for 4.9 per cent. Psoriasis is a common skin disorder and according to Farber and Nall [9] its prevalence in general population is between 1-3 per cent. Incidence of psoriasis was found to be 2.7 per cent by Falanga et al [8], 1.8 per cent by Gupta et al [3] and 1.5 per cent by Dayal and Gupta [5]. The higher incidence of psoriasis in our study is because most cases of psoriasis are given in-patient treatment.

Eczema, infection and papulosquamous disorder together accounted for 76.4 per cent of dermatological admission while life threatening dermatological disorders comprised of 3.9 per cent cases.

The trend of over-all admission of skin cases showed decline in yearly admission in year 1993 and 1994 while trends of yearly admission for various group of dermatological disorder did not show much variation (Table 1). Infective group, yearly admission varied from maximum of 49 cases (1985) to minimum 25 cases (1993). Similarly, in eczema from 59 (1989) to 31 (1993) cases, papulosquamous disorder 41 (19985) to 25 (1989) cases. There was decline in ad-

mission of bullous disorder from 8 in 1984 to just one case in 1992, 1993 and 1994 (Table 1).

The dermatological admission in civil set-up is mainly done for acute and life threatening skin disorders while in Armed Forces hospitals, non life threatening disorder forms major part of skin admission. This is largely because dermatologists are not available at all places where troops are located. All skin cases requiring dermatologist opinion are admitted and sent to hospital having dermatologist.

We conclude that the common dermatological admission in Armed Forces personnel includes eczema, infective disorders and papulosquamous disorders. There is marginal decline in overall yearly admission of dermatological cases from year 1984 to 1994.

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