

PATTERN OF DERMATOSES IN SKIN INPATIENT DEPARTMENT OF DHAKA MEDICAL COLLEGE HOSPITAL, BANGLADESH

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Abstract

The study was carried out to know the pattern of dermatoses among admitted patients in skin inpatient department from March 2009 to February 2010 in Dhaka Medical College Hospital. A total of 244 patients (124 female & 120 male) were admitted during this study period. Exfoliative dermatitis 52(21.31%) were the most commonest dermatoses, followed by Psoriasis vulgaris 28(11.47%), Pemphigus vulgaris 20(8.19%), Stevens Johnson Syndrome 20(8.19%), Bullous pemphigoid 16(6.55%), Erythema multiforme 16(6.55%), Systemic lupus erythematosus 12(4.91%), Scrofuloderma 12(4.91%), Scleroderma 12(4.91%), Darier's disease 8(3.27%), Vasculitis 8(3.27%), Psoriatic arthropathy 8(3.27%), Pemphigus vegetans 4(1.63%), Lupus vulgaris 4(1.63%), Tuberculosis verrucosa cutis 4(1.63%), Herpes zoster 4(1.63%), Erythema annulare centrifugum 4(1.63%), Chronic bullous disease of childhood 4(1.63%), Xanthoma tuberosum 4(1.63%). Mycosis fungoides 3(1.22%), Sezary syndrome 1(0.40%).

Key words: Pattern of dermatoses, prevalence.

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Introduction:

It is generally agreed that the pattern of skin diseases differs in different countries and within various regions of a country depending on social, economic, racial and environmental factors. According to WHO, prevalence studies of the general population in developing countries reported high prevalence figures for skin diseases (21-87%)¹. Skin diseases have high morbidity and low mortality because of its chronicity e.g. Psoriasis, Parapsoriasis, Darier's disease, but in case of autoimmune bullous diseases like Pemphigus the mortality rate also high. A retrospective study was carried out to know the pattern of skin diseases in admitted patients, because admitted patients are more serious; morbidity and mortality are also high.

Materials and Methods:

All admissible patients with any type of dermatoses irrespective of age and sex were admitted into the dermatology inpatient

department of Dhaka Medical College Hospital between the period of March 2009 to February 2010 were included in this study. The diagnosis was made by the dermatologist based on detailed history, clinical features and appropriate investigations like hematologic, biochemical and or skin biopsy for histopathology and direct immunofluorescence (DIF) tests. The diseases were arranged in a tabulated form on the basis of system, frequency, age and sex and the results were analyzed.

Results:

A total of 244 cases were admitted into the skin inpatient department during the study period of twelve months i.e. from March 2009 to February 2010. Among the 244 cases there were 120 (49.18%) male and 124 (50.81%) female. The various dermatoses were shown according to systematic way, frequency, age and sex distribution in table-I, II and III.

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Table-I

Pattern of skin diseases in skin inpatients department of Dhaka Medical College Hospital from March 2009 to February 2010 according to systematic way

Dermatoses	No. of patients (%)
1. Papulosquamous diseases	88(36.05%)
Exfoliative dermatitis	52(21.31%)
Psoriasis vulgaris	28(11.47%)
Psoriasis with arthropathy	8(3.27%)
2. Bullous disease	44(18.01%)
Pemphigus vulgaris	20(8.19%)
Bullous pemphigoid	16(6.55%)
Pemphigus vegetans	4(1.63%)
Chronic bullous disease of childhood	4(1.63%)
3. Drug reactions	36(14.75%)
Stevens Johnson syndrome	20(8.19%)
Vasculitis	8(3.27%)
Erythema multiforme	8(3.27%)
4. Connective tissue diseases	24(9.82%)
Systemic lupus erythematosus	12(4.91%)
Scleroderma	12(4.91%)
5. Skin tuberculosis	20(8.17%)
Scrofuloderma	12(4.91%)
Lupus vulgaris	4(1.63%)
Tuberculosis verrucosa cutis	4(1.63%)
6. Genodermatoses	8(3.27%)
Darier's disease	8(3.27%)
7. Viral diseases	12(4.91%)
Herpes Zoster	4(1.63%)
Erythema multiforme(HAEM)	8(3.27%)
8. Metabolic diseases	4(1.63%)
Xanthoma tuberosum	4(1.63%)
9. Malignant and pre-malignant diseases	4(1.63%)
Sezary Syndrome	1(0.40%)
Mycosis Fungoides	3(1.22%)
10. Others	4(1.63%)
Erythema annulare centrifugam	4(1.63%)
Total	244(100%)

Various dermatoses encountered according to systematic way. Among them commonest is the Papulosquamous diseases 88(36.05%), followed by Bullous diseases 44(18.01%), Drug reactions 36(14.75%), Connective tissue diseases

24(9.82%), Skin tuberculosis 20(8.17%), Viral diseases 12(4.91%), Genodermatoses 8(3.27%), Metabolic diseases 4(1.63%), Malignant and pre-malignant diseases 4(1.63%) and others 4(1.63%).

Table-II*Distribution of admitted patients according to frequency of dermatoses*

Dermatoses	Frequency
Exfoliative dermatitis	52(21.32%)
Psoriasis vulgaris	28(11.47%)
Pemphigus vulgaris	20(8.19%)
Stevens Johnson Syndrome	20(8.19%)
Bullous pemphigoid	16(6.55%)
Erythema multiforme	16(6.55%)
Systemic lupus erythematosus	12(4.91%)
Scrofuloderma	12(4.91%)
Scleroderma	12(4.91%)
Darier's disease	8(3.27%)
Vasculitis	8(3.27%)
Psoriasis with arthropathy	8(3.27%)
Pemphigus vegetans	4(1.63%)
Lupus vulgaris	4(1.63%)
Tuberculosis verrucosa cutis	4(1.63%)
Herpes Zoster	4(1.63%)
Erythema annulare centrifugam	4(1.63%)
Chronic bullous disease of childhood	4(1.63%)
Xanthoma tuberosum	4(1.63%)
Mycosis Fungoides	3(1.22%)
Sezary Syndrome	1(0.40%)

Table-II*Age and sex distribution of the admitted patients*

Age	Male	Female	Total
0-10	4(1.63%)	0	4(1.63%)
10-20	8(3.27%)	0	8(3.27%)
20-30	8(3.27%)	4(1.63%)	12(4.91%)
30-40	36(41.75%)	44(18.03%)	80(32.78%)
40-50	44(18.03%)	56(22.95%)	100(40.98%)
50-60	16(6.55%)	20(8.19%)	36(14.75%)
60-70	4(1.63%)	0	4(1.63%)
Total	120(49.18%)	124(50.819%)	244(100%)

Discussion:

Exfoliative dermatitis is also known as Dermatitis exfoliativa or Erythroderma. Erythroderma is frequently the result of

generalization of a preexisting chronic dermatoses such as Psoriasis or Atopic dermatitis. Many other cases are related to a medication, sezary syndrome, generalized dermatophytosis, pemphigus foliaceus, internal malignancy, idiopathic etc. In our study we have got 52 patients of erythroderma. Out of them 32(61.53%) patients, erythroderma developed from preexisting dermatoses (psoriasis 16 cases, Pityriasis rubra pilaris 8 cases, Seborrheic dermatoses 4 cases and Atopic dermatitis 4 cases). Rest of the erythrodermic patients 20(38.46%) were idiopathic cases.

The clinical presentation of autoimmune bullous diseases is often characteristic but not diagnostic and sometimes there may be overlap in their clinical presentation. The diagnosis of immunobullous diseases is based on the evaluation of clinical findings, histopathology & direct immunofluorescence (DIF) test. Effective treatment of immunobullous diseases also requires knowledge of the pathophysiology of the diseases and the pharmacology of the drugs to be used. Pemphigus vulgaris is an antibody mediated autoimmune bullous disease, causes significant morbidity and the current mortality rate is 5-10%³. We have got five cases of Pemphigus vulgaris, four cases of Bullous pemphigoid, one case of Pemphigus vegetans and one case of Chronic bullous disease of childhood. A total of 44 cases of autoimmune bullous diseases we have got in our study and it were the 18.01% of total cases. Morbidity and mortality of autoimmune bullous diseases is high, so number of admitted patients also more in our study.

There are high prevalence of tuberculosis in our country. We have got twenty cases of cutaneous tuberculosis. Out of them twelve cases are Scrofuloderma, four are Tuberculosis verrucosa cutis and another four are Lupus vulgaris. Histologically diagnosis was confirmed.

Psoriasis is a common chronic condition that affects about 1-3% of the population⁴. It can have a substantial impact of health related quality of life⁵. We have got five cases of psoriasis and two case of psoriasis with

arthopathy. The arthopathy was oligoarthritis type which is the most common type (70%) of psoriatic arthritis⁶.

Drug reaction is common in our country, morbidity and mortality also high. Stevens Johnson syndrome and Toxic epidermal necrolysis (TEN) usually represent adverse reaction to medication. We have got twenty cases of Stevens Johnson Syndrome, out of them eight cases from carbamazepine, four from NSAID (ketorolac), four from co-trimoxazole and another four, offending agent could not be identified. All the cases were improved with treatment.

Erythema multiforme, this original disease is called erythema multiforme minor or herpes simplex virus associated erythema multiforme (HAEM) and another one is erythema multiforme major, usually drug induced. We have got sixteen cases of erythema multiforme, among them eight were herpes simplex virus associated another eight were drug induced.

Among collagen diseases, we have got twelve cases of SLE and twelve cases of Scleroderma. All patients were improved.

In our study period, we have got eight cases of vasculitis, both were drug induced and leukocytoclastic vasculitis on histopathology, which is the most common type.

Darier's disease is a genodermatoses, usually worse in the summer season⁷. We have got eight cases of Darier's disease in our study period.

Sezary syndrome is the leukemic phase of the mycosis fungoides. It is difficult to treat, prognosis is also poor with an average survival of about 5 years⁸. In our study period we have got one patient of Sezary Syndrome and three patients of Mycosis Fungoides. After diagnosis,

we transfer this patient of Sezary Syndrome to hematology department for better management.

We got four cases of erythema annulare centrifugum. Etiology could not be found out. It is a clinical reaction pattern that does not represent a specific clinicopathologic entity⁹.

Xanthoma tuberosum is a metabolic skin disorder. We have got four patients.

Among the 244 patients, a few patients were chronic in nature but were admitted as academic cases for the students and the trainees.

References:

1. Bijayanti DT, Zamzachin G. Pattern of skin diseases in Imphal. *Indian J Pediatr.* 2006; 51: 149-50.
2. James WD, Berger TD, Elston DM. eds. *Andrew's diseases of the skin: clinical dermatology.* 10th ed. Philadelphia: Elsevier Saunders; 2006. p-216.
3. Bystyn J, Steinman N. The adjuvant therapy of pemphigus: an update. *Arch Dermatol.* 1996; 132: 203-12.
4. Grob JJ, Folchetti G. Epidemiology of psoriasis. In: van der Kerkhof P. ed. *Textbook of Psoriasis.* London: Blackwell; 1999. p.57-67.
5. Krueger G, Koo J, Lebwohl M, Menter A, Steem RS, Rolstad T. The impact of psoriasis on quality of life: results of 1998 National Psoriasis Foundation patient-membership survey. *Arch Dermatol.* 2001; 137: 280-4.
6. James WD, Berger TD, Elston DM. eds. *Andrew's diseases of the skin: clinical dermatology.* 10th ed. Philadelphia: Elsevier Saunders; 2006. p.220.
7. James WD, Berger TD, Elston DM. eds. *Andrew's diseases of the skin: clinical dermatology.* 10th ed. Philadelphia: Elsevier Saunders; 2006. p.567-8.
8. Freedberg IM, Eisen AZ, Wolf K. eds. *Fitzpatrick's dermatology in general medicine.* 5th ed. New York: McGraw-Hill; 1999. p.1233-42.
9. Ziemer M, Eisendle K, Zelger B. New concept of erythema annulare centrifugum. *Br J Derm.* 2009; 160: 119.