## **ORIGINAL CONTRIBUTIONS**

# PATTERN OF SKIN DISEASES IN PAEDIATRIC AGE GROUP AND ADOLESCENTS S K Sayal, A S Bal, CM Gupta

A total of 300 patients from first day of life to 17 years of age were analysed for pattern of skin disorders. School going children formed majority (41.3%) of cases followed by preschool children (32%). Infections formed the commonest disorder (31%) followed by eczemas (24%), papulosquamous disorders (12%). Infestation (8.6%) and urticaria (5.3%) while vitiligo, acne vulgaris, alopecia areata and genodermatoses were seen in 2.7% cases each.

Key Words: Paediatric age group, Adolescents, Dermatological disorders

#### Introduction

Dermatological problems accountfor about 20% - 30% of primary and secondary reasons for paediatric clinic visits. 1-4 The incidence of skin diseases in children has been reported to be 9% - 37% in various studies. The pattern of skin diseases in various countries may vary with the economical and social conditions, from pyoderma and malnutrition in the developing countries to eczema in developed countries.5 There are a few studies on the subject in India 6-9. but to the best of our knowledge, there has been no study to analyse dermatological disorders in nonadult population as a whole. The present study was undertaken with a view to study, the pattern of skin diseases in various age groups in children and adolescents.

From the Department of Dermatology and Venereology, Armed Forces Medical College And Command Hospital (SC) Pune-4) 1040, India

Address correspondence to: Col SK Saval

#### Materials and Methods

The material for this study comprised of 300 children from first day of life to 17 years of age attending the Dermatology and Paediatric clinic at Command Hospital (SC) Pune, from November 1995 to November 1996. The patients were further divided in subgroups according to age as neonates (1-28 days). infants (29 days to 1 year), preschool (1 year to 5 years) school going (15-12 years) and adolescents (12-17 yeas). A detailed history was taken in each case from parents as well as patients of school going and adolescent age group. Each case underwent a thorough general, systemic and dermatological examination by dermatologist and if required, by paediatrician. Relevant investigations were done in all cases whenever required.

#### Results

A total of 300 children including 193 (64.3%) males and 107 (35.7%) females were studied. The age-wise distribution showed

6(2%) neonatal, 31 (10.3%) infants, 96 (32%) preschool group, 124 (41.3%) school going children and 43 (14.4%) adolescents. The breakup of different dermatological disorders in different paediatric age group is shown in table 1. Out of total 93 cases of different infections, fungal infection was seen in 35.5% cases followed by bacterial infection (4.3%) and cutaneous tuberculosis (2.1%). The common fungal infections were pityriasis versicolor and tinea capitis while impetigo was the commonest bacterial infection. Molluscum contagiosum and warts were the common viral infections. Out of total 72 eczema cases pityriasis alba ac-

Table I. Agewise breakup of dermatological disorders in paediatric age group

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- 3 - 4( -	3(9.6) 14	4(14.6) 8(8.4)	7(5.7) 4(3.2) 7(5.7)	2(4.6)	36(12) 26(8.6) 16(5.3) 8(2.7)
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counted for 27.7% cases, atopic dermatitis 23.6%, seborrhoeic dermatitis and photodermatitis for 5.6% cases each and others 8.3% cases.

Among papulosquamous disorders psoriasis was present in 50% cases followed by lichen planus in 19.5% cases, pityriasis rosea, pityriasis rubra pilaris and lichen spinulosus in 8.3% cases each. Scabies was the commonest infestation accounting for 92% of all infestations.

Out of total 16 cases of urticaria 12(75%)

were of papular urticaria, Ichthyosis and epidermolysis bullosa were the common genodermatoses.

#### Discussion

The pattern of skin diseases in paediatric age group as well as in adults vary from one country to another and within the same country from one state to an other due to various climatic, cultural and socio-economic factors.

Skin infection is the commonest skin disease among paediatric age group. 9,10 Our study also showed high incidence of skin infection (31.2%) in all paediatric age group except infants. The high incidence of fun-

gal infection is probably due to 10-

cal climatic conditions. The lower incidence of bacterial infection may be due to better hygiene and economic conditions among children from defence personnel. The infestation was also low (8.6%) in our study as compared to another study in which it was present in 35.9% cases. Among eczemas a high incidence of pityriais alba 127.7%) was seen in our study as

compared to 12.4% by Valia et al<sup>6</sup> and Kumar et al.<sup>7</sup> Atopic dermatitis (23.6%) and seborrhoeic dermatitis (22.2%) was maximum in infants (48.6%) and minimal in adolescent group (11.7%). This is because pityriasis alba and atopic dermatitis tend to improve with age.

Among various papulosquamous disorders psoriasis was present in 50% of cases which seems to be quite high. Lichen planus was also seen in 19.5% of total papulosquamous disorders and this also seems to be

high. About 5.3% children had urticaria. In our study papular urticaria was commonest and this is likely to be due to insect bites.

Acne vulgaris was present in 2.7% cases and all were adolescents. Incidence of genodermatoses, vitiligo, vesicobullous and connective tissue disorders was also low in our study. Though this study confirms that communicable dermatoses (infections and infestations) form the majority of cases in children; it is also high-lighted that eczemas, papulosquamous disorders and urticaria also form a large percentage of cases. Since the majority of cases presenting with skin. disease are seen initially by primary care physicians, it is of utmost importance that they be well versed with those common dermatoses so that they can treat them at the earliest to reduce morbidity. This will go a long way in better development of the child.

### References

1. Hayden GF, Skin diseases encountered in a paediatric clinic. Am J Dis child 1985; 139:36-38.

- Krowchik, Bradham DD, Fleischer AB Jr. Dermatological services provided to children and adolescents by primary care and other physicians. Paediatr Dermatol 1994; 11:199-203.
- 3. Tunnersen WW Jr. A survey of skin disorders seen in paediatric and dermatology clinics. Paediatr Dermatol 1984; 1:219-222.
- 4. Shivaram V, Christoph RA, Hayden GF. Skin disorders encountered in a paediatric emergency department, Paediatr Emerg Care 1993.9:202-204.
- 5. Gram YC. Skin diseases in children in Singapore, Ann Acad Med Singapore 1988, 17: 569-572.
- 6. Valia AR, Pandey SS, Kaur P, et al. Prevalence of skin diseases in Varanasi school children, Indian J Dermatol Venereol Leprol 1991; 57: 141-143.
- 7. Kumar V, Garg BR, Baruah MC. Prevalence of Dermatological diseases in school children in a semi-urban area in Pondicherry. Indian J Dermatol Venereol Leprol 1988; 54:300-302.
- 8. Sharma NK, Garg BK, Goel M. Pattern of skin diseases in urban school children. Indian J Dermatol Venereol Leprol 1986; 52:330-331.
- 9. Sharma NL, Sharma RC. Prevalence of Dermatologic diseases in school children of a high altitude tribal area of Himachal Pradesh, Indian J Dermatol Venereol Leprol 1990:56:375-376.
- 10. Haden GF. Skin diseases encountered in a pediatric clinic. Am J Dis Child 1985; 139: 36-38.