ORIGINAL RESEARCH PAPER

Dermatology

CLINICAL SPECTRUM OF DERMATOSIS IN PAEDIATRIC POPULATION IN TERTIARY CARE HOSPITAL

KEY WORDS: Paediatric , Skin Manifestations, Prevalence

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ABSTRACT

CONTEXT: Background: Skin diseases are common in children, the incidence being 23% all over the world. The pattern of skin disease is a consequence of poor hygiene, illiteracy in many parts of India. The evaluation for skin disorders is an important component of primary health care practice for all.

AIM: To study the clinical spectrum of dermatosis in paediatric population in tertiary care hospital

METHODS AND MATERIAL: A total of 273 children were included in the study from central india. All the patients were subjected to detailed history taking and meticulous examination as per the proforma after getting the informed consent. The clinical manifestations in relation to pediatric dermatoses were recorded. The data obtained were subjected to descriptive analysis using SPSS software.

Statistical analysis used: Chi square test

RESULTS: Out of the 273 patients observed, 152 (55.6%) were males and 121 (44.4%) females. Adolescent group constituted highest percentage (28.2%) followed by toddler which constitutes 21.6% of total pediatric patients. Bacterial infections were the most common infection noted in the study.

CONCLUSION: The majority of the study population (28.2%) belong to adolescent age group. Of them, Males outnumbered Females. Bacterial infections were the most common infection noted in the study, followed by atopic dermatitis and acne.

INTRODUCTION:

Pediatric dermatology is an important branch of dermatology that deals with the diagnosis, treatment and prevention of skin diseases occurring in infancy, childhood and adolescence[1]. The pattern of skin disease is a consequence of poverty, malnutrition, overcrowding, poor hygiene, illiteracy and social backwardness in many parts of India[2]. Status of health, hygiene and personal cleanliness of a society can be judged from the prevalence of certain skin diseases in the children of community[3]. Wide range of primary skin disorders are seen during childhood and skin is often a marker of underlying systemic diseases and hereditary syndromes[4]. Subjects and Methods: The study was conducted in the Department of Dermatology, in a Tertiary Care Hospital after ethical committee approval in 273 children attending the outpatient department over 6 month interval. It was an observational prospective type of study. Children with age 18 years and below with clinical evidence of cutaneous disorders were included in this hospital-based descriptive study to determine the prevalence of various skin disorders and exclusion criteria applicable for this study was age above 18 years. All the patients were subjected to detailed history taking and meticulous examination as per the proforma after getting the informed consent. The clinical manifestations in relation to pediatric dermatoses were recorded. Detailed systemic evaluation was carried out in each case. Statistical test used was Chi-square test. The data obtained were subjected to descriptive analysis using SPSS software.

RESULTS:

Table 1 summarizes the Demographic data of study popul ation which included 273 pediatric patients of age 18 and below were included. Of them, 152 (55.6%) were males and 121 (44.4%) females.

Table 2 summarizes the Age wise distribution of patients. Total 29 infants(less than 1 year) were included in the study out of which 22 were male and 7 were female (10.6 % of total study population). Toddler (1-3 year) constituted 59(21.6%) patients having 34 males and 25 females. Preschool (3-5 year) has total of 57 patients(20.8%) out of which 27 are male and 30 are female .School age group (5-11 year) has total of 51 patients which constituted 32 males and 19 females. Adolescent group (11-18 years) constituted total of 77 patients (28.2%) of which 37 were male and 40 were female. Adolescent group constituted highest percentage (28.2%) followed by toddler which constitutes 21.6% of total pediatric patients.

Table 3 summarizes various Dermatologic Dermatosis obse rved in patients. Bacterial infections were the commonest of all the dermatosis observed . Out of bacterial infections, impetigo was the commonest constituting 22 cases out of total 44 bacterial infections(16.1%). Second most common dermatosis noted in paediatric population is atopic dermatitis which constituted 39 cases(14.2%). Next common dermatosis observed was acne constituting 37 cases (13.5%). Viral infection (12.4%) also constituted most of paediatric dermatosis , most commonly varicella seen in 12 of total patients . Fungal infections constituted 31(11.3%) of total patients out of which tinea corporis was the most commonly seen in 11 cases. Infestations constituted 30 (10.9%)of total patients out of which scabies were 24 and pediculosis capitis 06. Pityriasis alba constituted 29 cases(10.6%). Eczema was observed in 19 cases(6.9%) and hyperhidrosis in 12 cases(4.3%).

DISCUSSION:

The pattern of skin lesions in children is greatly influenced by climatic factors, dietary patterns and socioeconomic status and region. In our study, age group of 11–18 years constituted the maximum (48%) number of pediatric patients. Sacchidanand et al.[5] observed 5–11 years is the common age group followed by adolescents with 33.21% and 29.81%, respectively.

Sharma et al.[6] reported that pediatric dermatoses are more common in adolescent age group. Male patients outnumbered the female patients (51.4%) in our study as compared to that of Karthikeyan et al[7]. Present study showed that majority of cases belonged to the lower socioeconomic group (46.6 %) followed by the middle socioeconomic group (29.5%) as per Kuppuswamy socioeconomic classification[8]. This could be due to large rural population attending our

hospital .

In our study, majority of dermatoses belonged to infections and atopic dermatitis group (53.3%). Sacchidanand et al [5] and Bisht et al [9] reported infections and infestations to be 32.47% and 36.46%, respectively.

Negi[10] have reported them occurring in the range of 35.6–85%. In this study, whether institution based or community based, the infections and infestations were the main group of dermatoses. The higher frequency of infections in our study could possibly be due to large rural population of low socio-economic strata attending our hospital.

In our study , atopic dermatitis was the second most common which constituted to be 14.2% . Sacchidanand[5] et al reported atopic dermatitis as the most common eczematous dermatitis which constituted 6.12%.

Acne constituted 13.05 % of all dermatoses. All the patients of acne vulgaris belong to adolescent age group. In our study, infestations were seen in 10.9% of all dermatosis. Sacchidanand et al[5] and Bisht[9] et al reported infections and infestations to be 32.47% and 36.46%, respectively. Negi[10] et al have reported them occurring in the range of 35.6–85%

CONCLUSION :

The present study was undertaken to determine the characteristic clinical pattern and prevalence of pediatric dermatoses in central india as many patients come from Madhya Pradesh , Chattisgarh , Orrisa . The prevalence of certain dermatoses may be influenced by climatic changes. This was quite evident in our study in which atopic dermatitis was noted predominantly in winters while infections and infestations was seen more frequently in rainy season. A detailed knowledge about the pattern of pediatric dermatoses in each geographic area will help us in imple me nting essential changes in health education, disease control and preventive strategies in the area concerned.

Table 1: Distribution of patients according to age groups

GENDER	TOTAL
MALE	152 (55.6%)
FEMALE	121(44.4%)
	273

Table 2: Age wise distribution of patients

AGE	MALE	FEMALE	TOTAL
INFANTS <1 year	22	7	29(10.6)
TODDLER 1-3 year	34	25	59(21.6%)
PRESCHOOL 3-5 year	27	30	57(20.8%)
SCHOOL AGE 5-11 year	32	19	51(18.6%)
ADOLESCENT 11-18 year	37	40	77 (28.2%)
	152	121	273

Table 3 Various Dermatologic Dermatosis observed in patients

ETIOLOGY	DISEASE	CASES	TOTAL
BACTERIAL	Folliculitis Impetigo Furunculosis	14 22 06	44(16.1%)
VIRAL	Wart Molluscum contagiosum Varicella Herpes zoster Measles Dengue haemorrhagic fever	04 10 12 02 05 01	34(12.4%)
FUNGAL	Tinea capitis Tinea corporis Tinea faciei Tinea cruris Tinea versicolor	06 11 05 08 01	31(11.3%)
INFESTATIONS	Scabies Pediculosis capitis	24 06	30(10.9%)
ECZEMA	-	19	19(6.9%)
PITYRIASIS ALBA	-	29	29(10.6%)
ATOPIC DERMATITIS	-	39	39(14.2%)
ACNE	-	37	37(13.5%)
HYPERHYDROSIS	-	12	12(4.3%)

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