Prevalence of Clinical Study of Cutaneous Infection in Children

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Abstract

Background: Paediatric dermatoses are distinct group of disorders, comprising of skin problems encountered during childhood and adolescence. Skin diseases in the paediatric population are common all over the world. There is variation in the pattern and presentation of dermatoses, with eczemas being the most common skin disorder in developed countries and infections and infestations in the developing countries. **Methods:** Fifty children aged below 15 years, attending outpatient Department of Dermatology were included in this study. The diagnosis was made, based on detailed clinical history, general, systemic and cutaneous examination. Relevant investigations were carried out in necessary cases. The findings were recorded in proforma for analysis and interpretation of data. **Results:** In the present study, fifty children were included which were of below 15 year old. Among the fifty cases 30 (60%) were male and 20 (40%) were female. Out of 50 cases 4% 0-1 year, 10% 2-5 year, 20% 6-10 year and 26% 11-15 year old children were included. From the 50 patients, 58% were suffering from fungal infection, 24% from the viral infection and 18% from bacterial infection. **Conclusion:** This study conclude that, Proper sanitation, good hygiene, improving the nutritional status and creating health awareness can prevent infection.

Keywords: Cutaneous, children, Dermatitis, skin infection

INTRODUCTION

The commonness of skin infection differ from one country to another. In India, the main reasons of skin disease are poverty, malnutrition, overcrowding, poor hygiene, illiteracy and social backwardness. Skin infection among children vary, not even from country to country but it also vary within the same country from one state to another. The reasons behind this variation are due to various socio economic, cultural, and environmental factors. It has been reported that in dermatological practice 30% of the cases belongs to pediatric age group.^[1]

Pediatric dermatoses are distinct group of disorders, comprising of skin problems encountered during childhood and adolescence.^[2] Skin diseases in the pediatric population are common all over the world. There is variation in the pattern and presentation of dermatoses, with eczemas being the most common skin disorder in developed countries and infections and infestations in the developing countries. The incidence of pediatric dermatological conditions is on a gradual increase day by day. Dermatoses in children are more influenced by socioeconomic status, climatic exposure, dietary habits and external environment as compared to dermatoses in adults. Dermatologic conditions constitute at least 30% of all outpatient visits to pediatricians, and 30% of all visits to dermatologists involve children.^[3,4] The frequency of pediatric dermatoses in school based surveys in India has ranged from 8.7% to 35%.^[5] Cutaneous infections are common in children during school going years due to the fact that they are exposed to subclinical infectious cases by

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National Ribati University, Department of Pediatrics, KSA. intermingling with each other. The aim of the present study is to determine the pattern of common dermatoses in children attending the Government General Hospital, Vijayawada, Andhra Pradesh. The present study brings into light the unique features of Tropical paediatric dermatoses.

MATERIAL AND METHODS

Study population

50 children each of below 15 year were included in this study.

Study Area

This study conducted in a tertiary care center.

Study duration

The duration of the study were over a period of 8 month.

Sample collection & Methodology

Fifty children aged below 15 years, attending outpatient Department of Dermatology were included in this study. The diagnosis was made, based on detailed clinical history, general, systemic and cutaneous examination. Relevant investigations were carried out in necessary cases. The findings were recorded in proforma for analysis and interpretation of data.

Data analysis

Data were analysed with the using Microsoft excel.

RESULTS

Table 1: Gender wise distribution						
Gender	Number patients					
Male	30		60%			
Female	20		40%			
Total	50		100%			

In the present study, fifty children were included which were of below 15 year old. Among the fifty cases 30 (60%) were male and 20 (40%) were female. Out of 50 cases 4% 0-1 year, 10% 2-5 year, 20% 6-10 year and 26% 11-15 year old children were included. From the 50 patients, 58% were suffering from fungal infection, 24% from the viral infection and 18% from bacterial infection.

Table 3. Pattern of cutaneous infection

Table 2: Age wise distribution				
Age	Number of patients	Percentage		
0-1	2	4%		
2-5	5	10%		
6-10	10	20%		
11-15	13	26%		
Total	50	100%		

Fungal		Viral		Bacterial	
Tinea versicolor	17	Warts	5	Impetigo	6
		Molluscum contagiosum	4	Folliculitis	1
Tinea cruris	4			Cellulitis	1
				Nail fold infection	1
Tinea corporis	3	Herpes zoster	2		
Tinea capitis	2	Herpes simplex	1	_	
Candidiasis	2				
Tinea pedis	1				
Total	29 (58%)		12 (24%)		9(18%)

DISCUSSION`

Various social, economical, cultural and environmental factors lead to spread skin disease among children. Infants usually stays inside the houses while preschool children of age group 1 to 5 years are exposed to neighborhood and thus had environmental risks. Karthikeyan et al., reported in one of their study that the most prevalent skin problems were infection and infestation in 54.5% of the study population.^[6] The most common infection in the present study was fungal infection. 29 cases of fungal infection were encountered followed by 12 cases of viral infection and 9 cases of bacterial infection. Similar results were presented by Saval et al., and they also reported fungalinfection being the most common one.^[7]

In the present study details of 29 cases of fungal infection are presented. Tinea versicolor was the most common both in fungal infection and overall infection, constituting 17 cases out of 29 cases. The causative factors of tinea varsicolor may be sweating in the coastal area because of the high temperature and humidity. Molluscum contagiosum and wart have been reported as the most common viral infection.^[8,9] though Nanda et al, presented a contradictory report ant stated that warts are more common. Just like Nanda et al, the present study also reported warts to be the most common viral infection. A study conducted in rural Pakistan found that pyoderma was the most common disorder in children.^[6] Negi et al,. Conducted a study in Garhwal region and found that around 50% of the cases were related to infection and infestation. Other studies also reported the occurrence of pyoderma in the range of 35.6-85.2%.[10-15]

The present study also revealed that impetigo was the most common bacterial infection. It has been found with 6 cases followed by nail infection 1, cellulitis 1 and folliculitis.^[1].

CONCLUSION

This study conclude that, Proper sanitation, good hygiene, improving the nutritional status and creating health awareness can prevent infection. Early diagnosis and

treatment will cure the disease. Fungal infection was common because of humidity and sweating in the coastal area, which might be the cause for increase in incidence. In viral infection, the wart was the commonest followed by molluscum contagiosum and bacterial infection was less common probably because of good hygiene and awareness.

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