



PATTERN OF PEDIATRIC DERMATOSES IN TERTIARY CARE HOSPITAL, GOVERNMENT MEDICAL COLLEGE, KADAPA

Dr Sirisha N L*

Assistant professor Department of DVL Government medical college kadapa Andhra Pradesh Pin-516002 * Corresponding Author

ABSTRACT **BACKGROUND:** The prevalence of pediatric dermatoses varies world wide. Pediatric dermatoses has to be studied separately as there are important differences in clinical presentation, management and prognosis from that of an adult. **AIMS AND OBJECTIVES:** To study clinical and etiological presentation of pediatric dermatoses in tertiary care hospital, Kadapa. **Materials and Methods:** This is a prospective study carried out over a period of 1 year, from April 2017 to May 2018. Cases upto the age of 15 years attending the OPD of Government Medical college, Kadapa, Andhra Pradesh were selected for the study. All patients were divided into 4 study groups: <1 month, 1 month to 1 year, >1 year to 7 years and 8 to 15 years. **RESULTS :** There were 632 boys and 568 girls in a total of 1200 study population. Most common dermatoses in neonates were transient (35.58%), followed by dermatitis (24.54%) and infectious diseases (21.47%). Infectious diseases were the common presentation (54.58%) followed by dermatitis (18.32%), disorders of appendages (6.75%) and papulosquamous diseases (6.36%) in the study population of 1 month to 15 years age group of children. **CONCLUSION :** Due to varied presentation and burden of pediatric dermatoses there is a need to emphasize on training for dermatologists in pediatric subspecialty.

KEYWORDS :

INTRODUCTION :

Skin diseases in pediatric age group are common all over the world with reported incidence varying between 8.7% to 38.8%^{1,2,3,4,5,6}. Pediatric dermatoses require a separate view from an adult dermatoses as there are some differences in clinical presentation, treatment and prognosis. Skin diseases in pediatric age group can be transitory or chronic and recurrent. Lack of health care facilities in rural areas, lack of sanitation, overcrowding and malnutrition contribute to more incidence of infectious diseases in developing countries like India.

The study was done to determine the prevalence of different pediatric dermatoses in a tertiary care hospital, Kadapa, Andhra Pradesh, India. The data from the study can be useful in planning health care policies, health education and research activities.

MATERIALS AND METHODS:

This is a prospective study done in the out patient department of Dermatology, venerology and Leprology, Government Medical College, Kadapa, Andhra Pradesh, India over a period of one year from April 2017 to May 2018.

Consecutive 1200 patients aged up to 15 years were included in this study. Informed consent was obtained from the guardian of each patient included in the study. Patient's age, sex, socioeconomic status and personal cleanliness were noted. A detailed general, systemic and cutaneous examination along with relevant investigations were carried out.

The age group of children included in this was divided into four groups: <1 month, 1 month to 1 year, >1 year to 7 years and 8 years to 15 years.

The findings are recorded for analysis and interpretation of data.

RESULTS :

A total of 1200 children were enrolled in the study. There was a slight predominance of males (n=632) (52.67%) with a male to female ratio of 1.12:1. More than 1 year to 7 years is the largest group with 497 (41.4%) children constituting 260 (21.67%) boys and 237 (19.75%) girls.

TABLE 1: Age and sex wise distribution of study population.

SEX	<1Month	1Month-1year	>1 year-7years	8-15 years	Total	Percentage
Female	76	60	237	195	568	47.34%
Male	87	70	260	215	632	52.67%
Total	163	130	497	410	1200	100%

Among neonates transient disorder of the skin were most common presentation in this study constituted 35.58% followed by dermatoses

(24.54%), infection (21.47%) and congenital disorders (11.66%).

TABLE 2: Pattern of dermatoses in neonates.

Disorder	Neonatal dermatoses	Total	Percentage
A. Transient Disorder	1. Erythema Toxicum neonatorum	19	11.65%
	2. miliaria	16	9.83%
	3. milia	12	7.36%
	4. transient neonatal pustular melanoses	6	3.68%
	5. Neonatal acne	5	3.06%
B. Dermatitis	1. Seborrheic dermatitis	13	7.97%
	2. pityriasis alba	13	7.97%
	3. Diaper dermatitis	8	4.90%
	4. Atopic dermatitis	6	3.7%
C. Infectious diseases	1. Impetigo	25	15.33%
	2. Scabies	6	3.68%
	3. Molluscum contagiosum	2	1.23%
	4. Tinea corporis	2	1.23%
D. Congenital and pigmentary disorders	1. Haemangioma	9	4.77%
	2. Mongolian spot	8	4.24%
	3. Port wine stain	3	1.59%
	4. congenital Melanocytic nevus	2	1.06%
E. Miscellaneous	1. Papular urticaria	6	3.67%
	2. cutis marmorata	2	1.23%

TABLE 3: Pattern of dermatoses in 1 Month to 15 years age group

Disorder	1Month - 1year	>1 year-7years	8-15 years	Total
1. Infectious diseases	35	336	195	566 (54.58%)
2. Dermatitis	35	82	53	190 (18.32%)
3. Papulosquamous disease	1	23	42	66 (6.36%)
4. Disorder of appendages	14	16	40	70 (6.75%)
5. Nutritional diseases	12	22	26	60 (5.78%)
6. Pigmentary disorders	8	10	12	30 (2.89%)
7. Bullous disorders	1	2	3	6 (0.58%)
8. Miscellaneous	4	6	39	49 (4.72%)
Total	130	497	410	1037

Infectious diseases constituted 54.58% followed by dermatitis(18.32%), disorders of appendages(6.75%), papulosquamous disorders(6.36%) and nutritional dermatoses(5.78%) in the study population of 1Month to 15 years age group

TABLE 4: pattern of infectious diseases in 1Month to 15 years age group

category	Dermatitis	1M-1year	>1year -7years	8-15 years	total
A.Parasitic	1.scabies	12	156	85	253(24.39%)
	2.Pediculosis capitis	-	8	5	13(1.25%)
	3.Pediculosis corporis	-	-	1	(0.09%)
B.Bacterial	1.Impetigo	10	53	21	84(8.1%)
	2.Pyoderma	-	33	12	45(4.34%)
	3.Hansens disease	-	5	6	11(1.06%)
C.Fungal	1.Tinea capitis	8	30	18	56(5.4%)
	2.pityriasis versicolor	-	4	20	24(2.31%)
	3.Tinea capitis	-	18	12	30(2.89%)
	4.Cutaneous candidiasis	4	3	-	7(0.67%)
D.viral	1.Molluscum contagiosum	1	8	3	12(1.16%)
	2.Warts	-	4	5	9(0.87%)
	3.varicella	-	12	7	19(1.83%)
	4.HSV	-	2	-	2(0.19%)
	Total	35	336	195	566

The most common infectious dermatoses in the study population of 1Month to 15 years age group is parasitic infestation mostly scabies(24.39%), followed by impetigo(8.1%) and pyoderma (4.34%).

The most common viral infection in the study population of 1Month to 15 years age group is Molluscum contagiosum (1.16%) followed by varicella(1.83%) and warts(0.87%).

The most common noninfectious diseases in the study population of 1Month to 15 years age group is atopic dermatitis(5.23%), pityriasis alba(4.2%), seborrheic dermatitis(4.13%), pityriasis rosea (3.02%), guttate psoriasis(2.59%), vitiligo(2.53%), alopecia areata(1.58%), and,ichthyosis(0.78%).

Miscellaneous group in the study population of 1month to 15 years included Halo nevus, Piebaldism, morphea, xeroderma pigmentosum, pyogenic granuloma, verrucous epidermal nevus

DISCUSSION :

The study population included 1200 children with a slight male predominance with male to female ratio of 1.12:1.

The most common dermatoses seen in neonates were transient dermatoses constituted 35.58% a finding consistent with study by Sugat A Jawade et al⁷ Higher incidence has been reported by other studies like Federman,⁸ Kulkarni and Singh,⁹ Baruah et al,¹⁰ Nobby and Chakrobarthy,¹¹ and Patel et al,¹² Erythema toxicum neonatorum is the common transient disorder noted in neonates constituted 65% in this study. Incidence of 21-40% was reported in other studies.^{13,14}

Mangolian spots were observed in 4.24% of of neonates in this study. Less incidence has been reported in other studies.^{9,10,11,13,14}

We found Impetigo is the most common infection in neonates constituted 15.33% that differs from other study.⁷

Seborrheic dermatitis was observed in 7.97% of neonates in this study which is consistent with studies by Patel et al,¹² and Dash et al.¹³

Scabies was noted in 3.68% of neonates in this study .Sugat A Jawade et al reported incidence of scabies in 9.92%.⁷

In 1month to 15 years age group ,the most common dermatoses noted in this study were infectious diseases(54.58%) followed by dermatitis(18.32%). This findings are consistent with other studies done by Sugat A Jawade et al.⁷ Sayat et al,¹⁵ Karthikeyan et al,¹⁶ Less incidence of infectious diseases(11.4%) have been reported by Dogra and Kumar.¹⁷ However other studies in India have reported incidence of infectious diseases ranging from 35.6% to 85.2%.^{18,19,20,21}

We found parasitic infestation(47.17%) was the most common infectious dermatoses in the age group of 1 month to 15 years age group ,similar to result obtained by Bhatia,¹⁹ Negi,²⁰ and Sharma²⁵ Scabies was the most common of all parasitic infestation constituting 24.39%. The other studies reported the incidence of scabies ranged from 5.1% to 22.4%.^{17,18,20,21,22,23}

We found the incidence of pediculosis capitis in the age group of

>1month to 15 years was 1.25%; the other studies in India reported more incidence of pediculosis capitis ,about 54%^{19,20,22,23}.

Bacterial infections were second most common infectious disease in the study group of 1month to 15 years constituting 24.73%; the other studies like Patel et al,¹² and Thappa et al,²⁴ reported 24.90% and 25.64% respectively. Impetigo was the most common bacterial infection noted in 8.1% and pyoderma in 4.34% which is less than that found in other studies.^{18,19,20,22}

Varicella (1.83%) was the most common viral infection followed by Molluscum contagiosum (1.16%), wart(0.87%) noted in the study population of 1month to 15 years age group, while Patel et al,¹² reported higher incidence of warts in children.

The incidence of fungal infection was 20.67% in the study group of 1month to 15 years age group while Patel et al,¹² reported 7.8%. Tinea capitis was noted in 5.4% which is similar to the finding in other studies^{25,26} Prevalence of leprosy was noted in 1.06%.

The dermatitis was the second most common dermatoses noted in the age group of >1month to 15 years age group constituted 19.17% which is higher than the incidence reported by Dogra and Kumar(5.2%).¹⁷

Papulosquamous diseases were noted in 6.36% in the study population of >1month to 15 years , comparably higher than the incidence reported in study from Egypt(45%).²⁷

Nutritional diseases were noted in 5.78% of age group from >1month to 15 years ,which is less than the study by Sugat A Jawade et al.⁷

Pigmentary disorders were noted in 2.89% of study population of 1Month to 15 years age group ,similar to study by Sugat A Jawade et al(2.80%) Thappa(3.16%),²⁴ while higher incidence found in Patel et al(11.48%).¹²

CONCLUSION :

This study showed varied pattern of pediatric dermatoses. The magnitude and distribution of skin disorders in children in developing nations like India helps in identifying the disease burden. This study provides preliminary base line data for further epidemiological and clinical research .It might also help to assess the changing trends of pediatric dermatoses.