ORIGINAL RESEARCH

Assessment of cases of skin infections in children

[1]Dr. Esther Nimisha, [2]Dr. Mahipal Khandelwal

[1]Assistant Professor, Department of Dermatology, Saraswathi Institute of Medical Sciences, Hapur, Uttar Pradesh, India
[2]Assistant Professor, Department of Pediatrics, Saraswathi Institute of Medical Sciences, Hapur, Uttar Pradesh, India

Corresponding Author
Dr. Mahipal Khandelwal
Assistant Professor, Department of Pediatrics, Saraswathi Institute of Medical Sciences, Hapur, Uttar Pradesh, India

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ABSTRACT
Background: Up to 30% of pediatric consultations in primary care are related to dermatological issues. The present study was conducted to assess cases of skin infections in children. **Materials & Methods:** 110 children with skin disorders of both genders were selected. Dermatological diagnosis, direct and indirect immunofluorescence, direct mycological examination, histopathologywere carried out. **Results:** Age group 0-6 years had 27, 7-12 years had 43 and 12-17 years had 50 patients. The difference was significant (P< 0.05). Inflammatory diseases were Atopic dermatitis in 13, Psoriasis in 14, lichen planus in 3 and contact dermatitis in 5 cases. Infectious diseases were bacterial infections in 11, viral infections in 14, fungal infections in 4 and protozoal infections in 3 cases. Cysts and neoplasms were Melanocytic neviin 2, epidermal nevi in 4 and Mastocytosis in 8 cases. Pigmentary disorders were Melasma in 10, Vitiligo in 4 and post-inflammatory dyschromia in 5. Drug reactions were erythema multiforme in 3, fixed drug eruption in 5 and stevens-Johnson syndrome in 2 cases. The difference was significant (P< 0.05). **Conclusion:** Common age group affected was 12-17 years. Common skin disorders were inflammatory diseases, infectious diseases, cysts and neoplasms, pigmentary disorders and drug reactions.
Keywords: dermatological, fungal, Pigmentary

INTRODUCTION

Up to 30% of pediatric consultations in primary care are related to dermatological issues. The occurrence of dermatoses is influenced by environmental, social, and ethnic factors, and the disease pattern in children is different from that in adults.[1] In addition to variations in the prevalence of specific conditions across age groups, there are also variations in clinical presentation, response to treatment, risk of extracutaneous involvement, associated comorbidities, and prognosis; when the same disease is studied in adults and children, risk factors may also differ.[2,3]

Environmental and genetic factors influence the prevalence of skin conditions in children.[4] Clinical manifestations range from minor, localized alterations to widespread lesions that impair the patient's quality of life. histological confirmation is necessary for some diagnoses, and in some disorders, the diagnosis depends on the concordance between clinical and histological findings.[5] Children can develop inflammatory and neoplastic skin conditions. Indeed, there has been a reported rise in skin conditions among children. On the other hand, little information is known regarding the epidemiology and clinicopathological assessment of skin disorders in children.[6,7]The present study was conducted to assess cases of skin infections in children.

MATERIALS & METHODS

The study was carried out on 110 children with skin disorders of both genders. All parents gave their written consent to participate in the study.

Data such as name, age, gender etc. was recorded. Dermatological diagnosis, multidisciplinary follow-up, hospitalization, and supplementary diagnostic testing, including immunomapping, Wood's lamp examination, direct and indirect immunofluorescence, direct mycological examination, histopathology, and microscopy for parasite detection, were carried out.Results thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Age wise distribution of cases

Age groups (years)	Number	P value
0-6	27	0.05
7-12	43	
12-17	50	

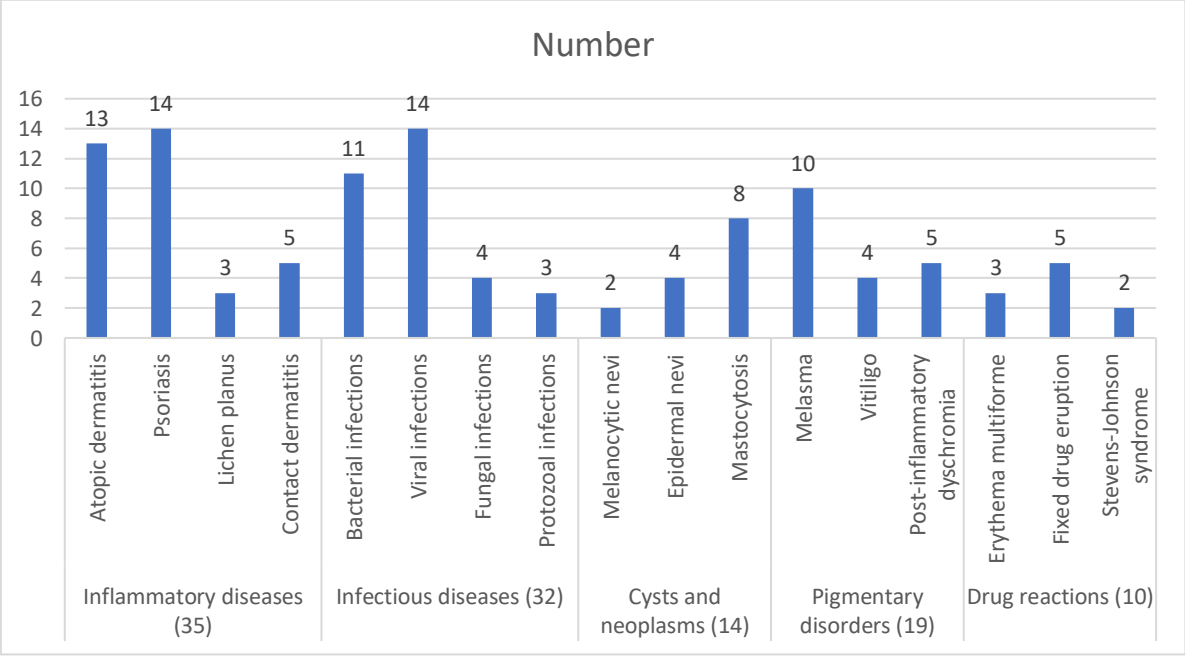
Table I shows that age group 0-6 years had 27, 7-12 years had 43 and 12-17 years had 50 patients. The difference was significant (P< 0.05).

Table II Type of skin disorders

Parameters	Variables	Number	P value
Inflammatory diseases (35)	Atopic dermatitis	13	0.05
	Psoriasis	14	
	Lichen planus	3	
	Contact dermatitis	5	
Infectious diseases (32)	Bacterial infections	11	0.04
	Viral infections	14	
	Fungal infections	4	
	Protozoal infections	3	
Cysts and neoplasms (14)	Melanocytic nevi	2	0.05
	Epidermal nevi	4	
	Mastocytosis	8	
Pigmentary disorders (19)	Melasma	10	0.03
	Vitiligo	4	
	Post-inflammatory dyschromia	5	
Drug reactions (10)	Erythema multiforme	3	0.05
	Fixed drug eruption	5	
	Stevens-Johnson syndrome	2	

Table II, graph I shows that inflammatory diseases were Atopic dermatitis in 13, Psoriasis in 14, lichen planus in 3 and contact dermatitis in 5 cases. Infectious diseases were bacterial infections in 11, viral infections in 14, fungal infections in 4 and protozoal infections in 3 cases. Cysts and neoplasms were Melanocytic nevi in 2, epidermal nevi in 4 and Mastocytosis in 8 cases. Pigmentary disorders were Melasma in 10, Vitiligo in 4 and post-inflammatory dyschromia in 5. Drug reactions were erythema multiforme in 3, fixed drug eruption in 5 and stevens-Johnson syndrome in 2 cases. The difference was significant (P< 0.05).

Graph I Type of skin disorders



DISCUSSION

It is well known that different nations and even different parts of the same nation have diverse patterns of skin diseases.[8] Understanding the needs of the people and the current problems is essential given the need for improved resource allocation in clinical care and research.[9] There may be a misconception that dermatological conditions do not have a significant impact on patients or the healthcare system because of the large prevalence of dermatoses that are deemed non-severe.[10] However, basic illnesses like eczema and acne vulgaris can have significant psychological effects on the individual and can be expensive for the health system when impairment, sequelae, and years of life lived with handicap are taken into account.[11]The present study was conducted to assess cases of skin infections in children.

We found that age group 0-6 years had 27, 7-12 years had 43 and 12-17 years had 50 patients. Marks et al[12] in their study, the prevalence of atopic dermatitis (AD) was recorded in a random sample of 2491 school students. The overall prevalence, based on clinical examination, was 16.3% (95% confidence interval, CI 14.1–18.5), being higher in girls (17.7%; 95% CI 15.0–20.4) than boys (14.8%; 95% CI 11.8–17.8). Using the U.K. Working Party Diagnostic Criteria for AD reduced the prevalence to 10.8% (95% CI 9.3–12.3) with the prevalence in girls 12.3% (95% CI 10.1–14.4) and in boys 9.2% (95% CI 7.1–11.4). The prevalence was highest in 4–6 year olds (18.7% on clinical examination, 11.5% using the U.K. Working Party Criteria), decreasing with increasing age to 11.6% on clinical examination (8.6% on U.K. Working Party Criteria) among 16–18 year olds. Most of those with AD were classified as having mild disease (54.1%), with 32.1% classified as having minimal and 13.8% as having moderate to severe disease. Over 80% of those who reported on the questionnaire that they had dermatitis that was then confirmed on examination had been using one or more products to treat it. Nearly 90% of these products were classified as efficacious, with medical practitioners being the major source of advice for their use (77%). Pharmacists (8%), family/friends (6%) and others (9%), including beauticians and naturopaths, made up the remainder of the persons from whom those affected had sought advice about their treatment.

We found that inflammatory diseases were Atopic dermatitis in 13, Psoriasis in 14, lichen planus in 3 and contact dermatitis in 5 cases. Infectious diseases were bacterial infections in 11, viral infections in 14, fungal infections in 4 and protozoal infections in 3 cases. Cysts and neoplasms were Melanocytic neviin 2, epidermal nevi in 4 and Mastocytosis in 8 cases. Pigmentary disorders were Melasma in 10, Vitiligo in 4 and post-inflammatory dyschromia in 5. Drug reactions were erythema multiforme in 3, fixed drug eruption in 5 and stevens-Johnson syndrome in 2 cases. Mohammedamin RS et al[13]compared incidence rates of skin diseases in children in general practice between 1987 and 2001.The incidence rate of all skin diseases combined in general practice decreased between 1987 and 2001. Among infants the incidence rate increased. Girls presented more skin diseases to the GP. In the southern part of the Netherlands children consulted their GP more often for skin diseases compared to the northern part. Children of non-Western immigrants presented relatively more skin diseases to the GP. In general practice incidence rates of specific skin diseases such as impetigo, dermatophytosis and atopic dermatitis increased in 2001, whereas warts, contact dermatitis and skin injuries decreased.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that common age group affected was 12-17 years. Common skin disorders were inflammatory diseases, infectious diseases, cysts and neoplasms, pigmentary disorders and drug reactions.

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