

Retrospective Assessment of Prevalence of Psoriasis Among Children of Known Population: An Observational Study

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ABSTRACT

Background: Childhood psoriasis is a well-recognized entity, but its true prevalence is not known. Hence; the present retrospective was conducted for assessment of prevalence of Psoriasis among children of known population.

Materials & Methods: Data records of a total of 856 children were analysed. Data of only those patients were included for analysis in which complete clinical records were available. Psoriasis was diagnosed on the basis of clinical symptoms and Clinico-pathologic findings, as evident from the record files. In patients with presence of psoriasis, the spectrum of clinical profile was recorded separately. Detailed information in relation to the age of onset, family history and past medical history was also obtained from record sheets.

Results: Overall prevalence of psoriasis among paediatric population in the present study was found to be 5.58 percent. Plaque, scalp, nails and flexural type of psoriasis were the most common clinical types encountered, found to be present in 50 %, 26 %, 10 % and 10% of patient population respectively.

Conclusion: Childhood psoriasis is a serious problem affecting significant amount of paediatric population. Therefore; education of both paediatric patients and their parents is indispensable for positively and safely managing the disease.

Key words: Children, Psoriasis, Prevalence.


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INTRODUCTION

Psoriasis is an inherited papulosquamous disorder with a variable clinical spectrum. As much as 40% of adult patients with psoriasis have reported manifestations of this condition in childhood, with at least one-third of the patients demonstrating features of psoriasis before the age of 16.1 years.¹⁻³ Childhood psoriasis is a well-recognized entity, but its true prevalence is not known. Psoriasis can be a life-altering disease with a potentially profound impact on physical, emotional and social functioning and overall quality of life in children. It is aptly said that children are not simply small adults and that is true for childhood psoriasis as compared to psoriasis in adults.^{4,5} The childhood psoriasis differs in epidemiology, clinical features, treatment options, and long-term clinical and psychological outcome.⁶

Hence; the present retrospective was conducted for assessment of prevalence of Psoriasis among children of known population.

MATERIALS & METHODS

The present study was conducted in the Department of Paediatrics, Narayan Medical College, Jamuhar, Sasaram, Bihar

(India) and it included assessment of prevalence of Psoriasis among children of known population. Data records of a total of 856 children were analysed. Data of only those patients were included for analysis in which complete clinical records were available. Psoriasis was diagnosed on the basis of clinical symptoms and Clinico-pathologic findings, as evident from the record files. In patients with presence of psoriasis, the spectrum of clinical profile was recorded separately. Detailed information in relation to the age of onset, family history and past medical history was also obtained from record sheets. All the results were recorded and were analysed by SPSS software.

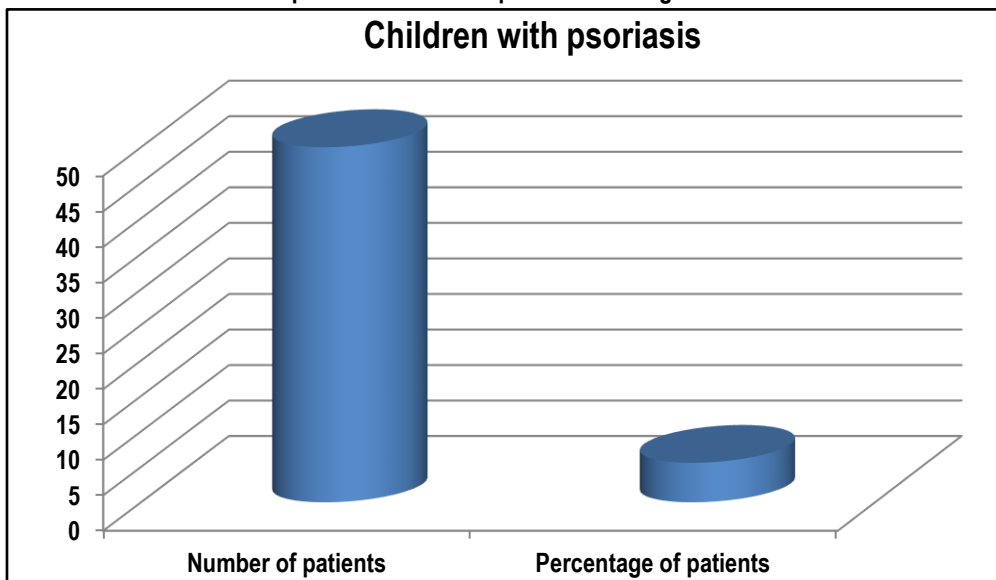
RESULTS

In the present study, analysis of a total of 856 patient's data record was done. Overall prevalence of psoriasis among paediatric population in the present study was found to be 5.58 percent. In the present study, out of total 50 paediatric patients with psoriasis, 30 were males and the remaining 20 were females. Mean age of the psoriatic patients of the present study was 14.5

years. In the present study; plaque, scalp, nails and flexural type of psoriasis were the most common clinical types encountered,

found to be present in 50 %, 26 %, 10 % and 10% of patient population respectively.

Graph 1: Prevalence of psoriasis among children



Graph 2: Types of psoriasis seen in paediatric patients

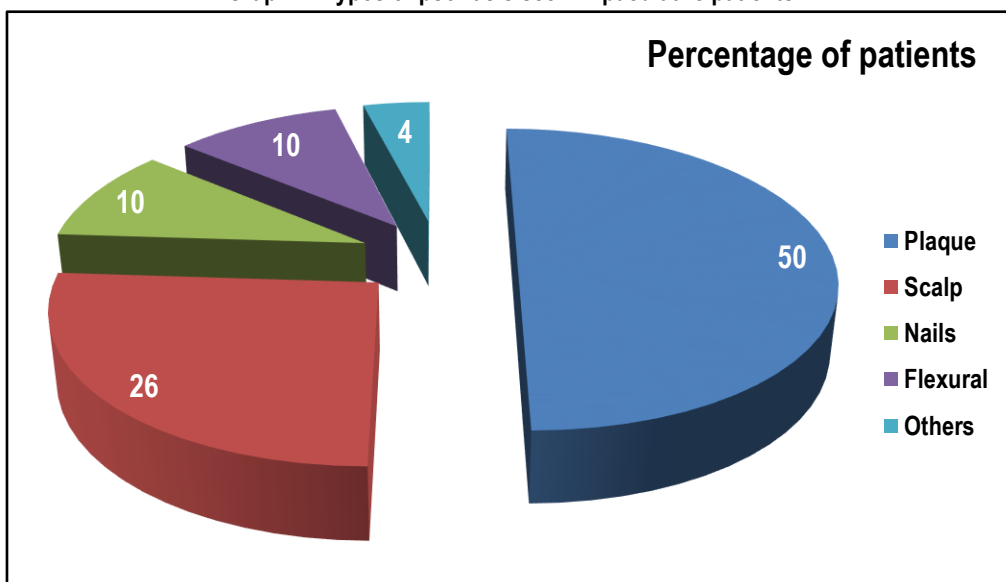


Table 1: Demographic details of psoriasis patients

| Parameter | n |
|------------------|------|
| Mean age (years) | 14.5 |
| Males | 30 |
| Females | 20 |
| Total | 50 |

Table 2: Types of psoriasis seen in paediatric patients

| Type of psoriasis | n | % |
|-------------------|----|----|
| Plaque | 25 | 50 |
| Scalp | 13 | 26 |
| Nails | 5 | 10 |
| Flexural | 5 | 10 |
| Others | 2 | 4 |

DISCUSSION

Psoriasis is a chronic immune-mediated inflammatory disease most commonly manifested by well-demarcated erythematous plaques with silvery white scales on the elbows, knees, scalp and trunk. Childhood psoriasis is a well-recognized entity, but its true prevalence is not known. It differs in epidemiology, clinical features, treatment options, and long-term clinical and psychological outcome.⁷⁻⁹ Hence; the present retrospective was conducted for assessment of prevalence of Psoriasis among children of known population.

In the present study, analysis of a total of 856 patient's data record was done. Overall prevalence of psoriasis among paediatric population in the present study was found to be 5.58 percent. In a study of 419 patients of childhood psoriasis from North India, it constituted 0.3% of all dermatology outpatients and 12.5% of the total psoriasis patients at a tertiary care hospital. Psoriasis comprised 1.4% of all pediatric dermatoses seen in

patients less than 14 years of age at a referral hospital in South India.^{5,6} Pediatric psoriasis consists of three age groups of psoriatic patients like infantile psoriasis, a self-limited disease of infancy, psoriasis with early onset, and pediatric psoriasis with psoriatic arthritis. The varied clinical presentations in childhood include plaque-type, guttate, erythrodermic, napkin, and nail-based disease. Like all forms of auto-immunity, susceptibility is likely genetic, but environmental triggers are required to initiate disease activity.^{10,11}

In the present study, out of total 50 paediatric patients with psoriasis, 30 were males and the remaining 20 were females. Mean age of the psoriatic patients of the present study was 14.5 years. Although children present with the same clinical subtypes of psoriasis seen in adults, lesions may differ in distribution and morphology, and their clinical symptoms at presentation may vary from those reported by adults. In childhood, typical erythematous plaques with overlying white scale are often thinner and smaller and psoriasis lesions tend to develop more often on the face and flexural areas. These lesions are characterized by maceration and less prominent scale. Despite these predilection sites, psoriasis papules and plaques can develop on any skin area and are usually symmetrically distributed. Young children usually present with a diaper rash that is unresponsive to irritant diaper dermatitis treatment. Psoriatic diaper rash is seen in young infants and is characterized by sharply demarcated, minimally elevated erythematous plaques in the diaper area, involving the inguinal folds.^{9,10}

In the present study; plaque, scalp, nails and flexural type of psoriasis were the most common clinical types encountered, found to be present in 50 %, 26 %, 10 % and 10% of patient population respectively. The peak age of onset in childhood psoriasis varied in different studies. In surveys from India and Denmark, most patients developed first symptoms at the ages of 6 to 10 years, whereas other studies from the Middle East and Australia reported a peak of onset at the ages of up to 4 years. Studies from the Denmark and Middle East have shown a female preponderance, but reports from India and Australia have documented equal sex predisposition.¹¹⁻¹³ Kimball et al. demonstrated an increased risk of developing depression, anxiety and bipolar disorder in psoriatic children compared with control subjects. In addition, children suffering from psoriasis had a 47 % greater risk of taking psychotropic medications. Since the rate of antidepressant and anxiolytic medication use is higher than the incidences of depression and anxiety disorder in this study, and psychotropic medications are more likely to be used for more severe cases, the true incidence of psychiatric diagnoses may be even higher.¹⁴

CONCLUSION

Under the light of above obtained data, it can be concluded that childhood psoriasis is a serious problem affecting significant amount of paediatric population. Therefore; education of both paediatric patients and their parents is indispensable for positively and safely managing the disease.

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