

Childhood psoriasis a clinical and epidemiological study in Samawa cityArwaa A. Abdul-Hussein¹, Fatima Emad Hussain¹, Haider Hamid Shaker²**Abstract**

Childhood psoriasis is common, but it has not been adequately reported in our city. This study was done to evaluate the epidemiological and clinical findings in children with psoriasis and to compare the data with those from other studies. Thirty children with psoriasis were taken in this study which is done in outpatients' dermatological clinic during the period from July of 2018 to December of 2018. The age of our patients ranged from 6 months to 14 years, in which there are 17 boys and 13 girls. The Plaque type psoriasis and generalized distribution were the commonest findings. Positive family in (36.6%), keratinization was (30%). The frequent symptom was pruritus (16.6%) and discomfort 10%. As a result, childhood psoriasis is a different entity from adult psoriasis, early diagnosis, and appropriate management are particularly important in children to solve long-term disease-related psychosocial problems.

Key words: Psoriasis, Vulgaris, Guttate, Childhood

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Introduction

Psoriasis is a common chronic inflammatory disorder of the skin with unknown etiology, it started in childhood in about one-third of the cases [1]. It is characterized by erythematous papules and plaques covered with dry silvery scale. The incidence of psoriasis among dermatological patients in childhood and adolescence was 3.8% [1,2], up to 40% of people with psoriasis have symptoms before they are 16 years old, and 10% get it before they're 10. In fact, the real incidence of childhood psoriasis is much higher than that reported as several adult patients with onset of the disease before the age of 16 did not seek any medical help [2]. Though children present with the similar clinical types of psoriasis seen in adults, lesions may be different in morphology, distribution and their clinical symptoms from those shown up by adult patients. Nevertheless, the diagnosis of psoriasis is primarily based on clinical features [4]. Pediatric psoriasis can have great long-term effects on the psychological health of diseased children. Additionally, pediatric psoriasis has been associated with

certain comorbidities, such as obesity, hypertension, hyperlipidemia, diabetes mellitus and rheumatoid arthritis [1, 2, 5].

Materials and Methods:

This cross-sectional study was done in outpatients' dermatological clinic in Al-Hussein teaching hospital and private clinic from a period of July of 2018 to December of 2018. A total of 30 child patients with psoriasis their age ranges from 6 months-14 years who were diagnosed, treated and followed up by dermatologist. All patients were diagnosed with psoriasis clinically. The data were extracted from the patients or their families including:

- 1- epidemiological data: age, gender, seasonal influence, familial history, and possible triggering factors.
- 2- clinical features: clinical types of psoriasis, presenting sites, subjective symptoms, Koerner phenomenon, types of nail change, mucosa and joint involvements, associated disorders.

Result

30 Patients with psoriasis 17 boys and 13 girls. Their age ranged from 6 months to 14 years with a mean of 7.2 years. The mean age of boys and girls were 6.4 and 7.7 years respectively. The peak age of onset in boys was in the 12-14- and 2-4-year age group, whereas most girls had an onset of psoriasis at 10-12 years. Table (1) shows age groups distribution among boys and girls. It appeared that the lowest no. of patients occurred in infants less than one year (2 patients), while the highest no. occurred in the age group between 10-12 in (7 patients). Overall the result showed psoriasis occurred more in female than male in our study. The common sites of involvement in psoriasis were showed in table 2, in which generalized plaque psoriasis all over the body was a common site in 19 pat. (63.3%). Whereas the nail and intertriginous area had the lower number. Table 3 showed the common type of psoriasis in our patients. The psoriasis Vulgaris (classical plaque psoriasis) was the most frequent type of psoriasis at the time of presentation 14 (46.6%) and it most frequent in girls than boys followed by the scalp psoriasis 5 pat. (16.6%) and guttate psoriasis 4 pat. (13.3%) only 2 (50%) of them report a history of flu-like illness or upper respiratory tract infection to precede the diseases. Positive family history of psoriasis was present in 11 patients (36.6%), mostly first-degree relative (parents/brothers/sisters). Koebnerization was observed in 9 patients (30%). The frequent symptom was pruritus occur in 5 (16.6%) and discomfort in 3 patients (10%). Associated diseases were reported in one patient who had diabetes mellitus and vitiligo, one patient had vitiligo and alopecia areata

and one patient suffering from morbid obesity due to side effects of topical and systemic steroid.

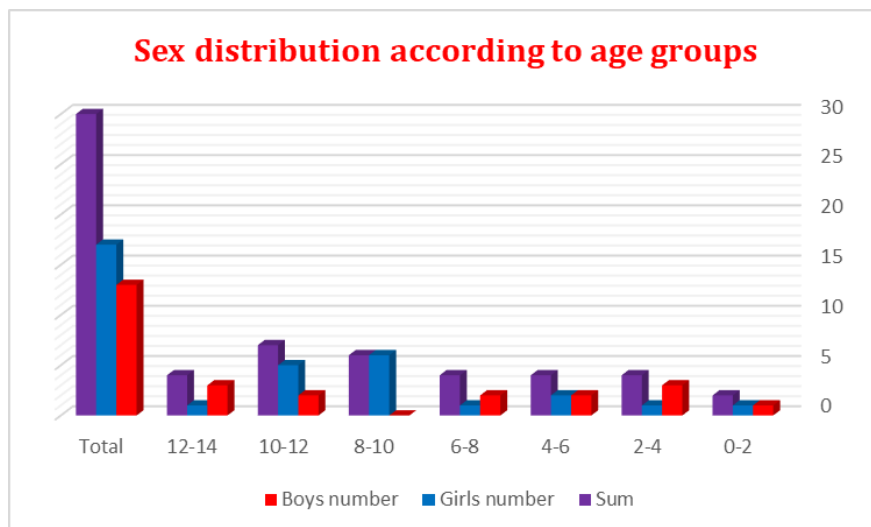


Figure 1.

Sex distribution

Table 2.

No. of patients according to distributed site of psoriasis

Site	Number of patients	of the total%
Generalized	19	63.3
Scalp	7	23.3
Trunk	2	6.6
Nail	1	3.3
Intertriginous	1	3.3

Table 3.

No of patients according to type of psoriasis

Type of psoriasis	Girls	% of the Sum	Boys	% of the Sum	Sum	% of the total
Vulgaris	9	64.3	5	35.7	14	46.6
Scalp	3	60	2	40	5	16.6
Guttate	3	75	1	25	4	13.3
Palmoplantar	0	0	2	100	2	6.6
Inverse	1	50	1	50	2	6.6
Sebopsoriasis	0	0	1	100	1	3.3
Erythroderma	0	0	1	100	1	3.3
Nail only	1	100	0	0	1	3.3
Total	17	56.6	13	43.3	30	100



Figure 1

psoriasis in 8 months child of 3 weeks duration



Figure 2.

Psoriasis in the arm of 12 years old female patient (relapse)



Figure 3.

Psoriatic lesion in the thigh of 10 years old child (relapse)

Childhood psoriasis is a well-acknowledged entity, but its exact prevalence is unknown [1, 2]. There are very little epidemiologic studies presented in the literature. Our study aimed to highlights psoriasis in pediatric age groups. Childhood psoriasis has been reported to differ from adult psoriasis in that it is pruritic more frequently, as twice as common in females, and the lesions are quite thinner, softer, and less scaly [6]. Certain clinical variants found in adults are rare in children, such as erythroderma, arthropathy, and localized and generalized pustular psoriasis. Regarding sex distribution, in this study, we found that there is a female predominance similar to finding observed by other studies [1, 2, 7]. In contrast with earlier reports where most children had an onset of disease before 5 years of age [7, 8], the peak

age of onset in our cases in boys was in the 12-14, whereas the majority of girls had an onset of psoriasis at 10-12 years.

Variable familial incidence has been reported in childhood cases of psoriasis, ranging from 9.8% to 89% [2, 4]. We found a positive family history in only 36.6% of our patient but there were no correlations with the onset, gender, age or severity of psoriasis. The low familial incidence in our study could be explained by the ignorance of family members about the existence of the disease, or the actual absence of the disease at the time of presentation, which may subsequently appear. Results based on a single direct interview at the time of presentation suffer from this handicap. This has been proposed that the chance of finding familial involvement might increase in a multicentric collaborative approach, as the chance of finding relatives with psoriasis increases with long-term follow up and detailed family study [3]. Plaque type lesions were the most common variety in this study, as observed in almost all previous studies [1-5], although the percentage varies. The second common type was scalp psoriasis. Also, we observed that the generalized distribution was the common presentation of our patients. Other types of psoriasis was recorded in less frequency such as guttate, inverse psoriasis, in spite of the flexors and diaper regions, which are friction/trauma-prone sites, have been found by other studies to be more commonly involved in infants and young children [1-3], this could be explained by short duration of study that affects the number of cases of such type.

Another marked difference between our series and others was the absence of any convincing mucosal involvement, while in one study the mucosa was involved in up to 7% of children [10], face involvement occurs in 4 patients (13.3%). Children in the countries such as ours are exposed to the ultraviolet rays of the sun all the time, so that less frequent involvement of sun-exposed sites, such as the face, and the opposite is truth regard the cold western countries [17].

Conclusion

A chronic disfiguring skin disease, such as psoriasis in childhood is likely to have profound emotional and psychological effects and hence requires special attention. To understand psoriasis in this age group, it is essential to understand the morphologic types, natural history, and exogenous and endogenous factors responsible for the increased morbidity of this disease, in addition, more investigations are demanded. In order to help the sufferers with psoriasis. Management also involves education of patients and their parents concerning the nature of the disease and the effects of treatment. Combined efforts can make a great difference in the outcome of psoriasis in pediatric patients.

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