**Childhood psoriasis a clinical and epidemiological study in Samawa city**

**Cross Sectional Study**

**By**

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**Abstract**

**Background:** 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.

**Patients and material :** thirty child 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.

**Result:** 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 finding. Positive family in (36.6%), koebnerization was (30%). The frequent symptom was pruritus (16.6%) and discomfort (10%).

**Conclusion:** 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.

 **Keywords:** psoriasis(vulgaris) , childhood .

**Introduction**

Psoriasis is a common chronic inflammatory skin disorder with unknown etiology, it begins in childhood in almost 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're 16 years old, and 10% get it before they're 10. In fact, the actual incidence of childhood psoriasis is much higher than that reported as many adult patients with onset of the disease before the age of 16 did not seek any medical help[2]. Although children present with the same clinical subtypes of psoriasis seen in adults, lesions may differ in distribution, morphology, and their clinical symptoms from those reported by adult patients. Nevertheless, diagnosis of psoriasis is primarily based on clinical features[4]. Pediatric psoriasis can have a profound long-term impact on the psychological health of affected children. Additionally, pediatric psoriasis has been associated with certain comorbidities, such as obesity, hypertension, hyperlipidemia, diabetes mellitus and rheumatoid arthritis[1, 2, 5] .

**Patients and method**

This 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 range from 6months-14years 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, koebner phenomenon, types of nail change, mucosa and joint involvements, associated disorders.

**Result**

A 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 the majority of girls had an onset of psoriasis at 10-12 years.

Table (1) shows age groups distribution among boys and girls. It was appeared that the lowest no. of patients occurred in infants less than one year (2 patients), while the highest no. occurred in aged group between 10-12 in (7 patients). Over all the result showed the 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 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 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 patient (10%). Associated diseases were reported in one patients who had diabetes mellitus and vitiligo, one patients had vitiligo and alopecia areata and one patient suffer from morbid obesity due to side effects of topical and systemic steroid.

**Table 1: Sex distribution according to age group**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Age group** | **Boys****Number** | **Boys % of the total** | **Boys: Girls Ratio** | **Girls****Number** | **Girls % of the total** | **Sum** |
| 0-2 | 1 | 3.3 | 1:1 | 1 | 3.3 | 2(6.6%) |
| 2-4 | 3 | 10 | 3:1 | 1 | 3.3 | 4(13.3%) |
| 4-6 | 2 | 6.6 | 2:2 | 2 | 6.6 | 4(13.3%) |
| 6-8 | 2 | 6.6 | 2:1 | 1 | 3.3 | 4(13.3%) |
| 8-10 | 0 | 0 | 0:6 | 6 | 20 | 6(20%) |
| 10-12 | 2 | 6.6 | 2:5 | 5 | 16.6 | 7(23.3%) |
| 12-14 | 3 | 10 | 3:1 | 1 | 3.3 | 4(13.3%) |
| **Total** | 13 | 43.3 | 13:17 | 17 | 56.6 | 30(100%) |

**Table 2: No. of patients according to distributed site of psoriasis**

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

**Table3: No of patients according to type of psoriasis**

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

**Discussion**

Childhood psoriasis is a well recognized entity, but its true prevalence is not known[1, 2]. There are very few epidemiologic studies available in the literature. Our study aimed to highlights the psoriasis in pediatric age groups. Childhood psoriasis has been reported to differ from psoriasis in adults in that it is more frequently pruritic, twice as common in females, and the lesions are relatively 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 age, gender or severity of disease. 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, inspite 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 explain by short duration of study that affect 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 were involved in up to 7% of children[10], face involvement occur 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[7].

**Conclusion and recommendation**

A chronic disfiguring skin disease, such as psoriasis in childhood is likely to have profound emotional and psychologic 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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