# **Case Report**

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# Juvenile psoriasis: a case report

## Ishwarya S\*, Revathi Shree R, Bharathi K, Savitri M. Nerune, Manimaran D

Department of Pathology, Shri Sathya Sai Medical College and Research Institute, Ammapettai, Nellikuppam-603108, Chengalpet, Kanchipuram, Tamil Nadu, India

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## \*Correspondence:

Dr. Ishwarya S,

E-mail: ishwaryashanmugam16@gmail.com

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#### **ABSTRACT**

Psoriasis is a chronic inflammatory immunologically mediated dermatoses characterized by erythematous plaque covered by loosely adherent scales. Psoriasis in children is a rare entity which may lead to psychological impairment and complications, hence early recognition and management of psoriasis in children is crucial. Here we present a case of 2 year old boy with multiple erythematous scaly plaques over lower back, gluteal region, elbows, knees and lower legs. Biopsy from gluteal region showed microscopic features of psoriasis. This case is presented here to highlight the importance of early recognition and management of juvenile psoriasis.

**Keywords:** Psoriasis, Children, Juvenile psoriasis

## INTRODUCTION

Psoriasis is a chronic inflammatory dermatoses characterized by erythematous plaques covered by loosely adherent scales which is mainly an immunologically mediated disorder. Childhood psoriasis is a well-recognized entity, but its true prevalence is still controversial. This chronic disfiguring skin disease in childhood is known to have profound psychological effects and related complications. Childhood psoriasis as compared with that of adults differs in many aspects such as epidemiology, clinical features, treatment, long term clinical and psychological outcome and hence requires special attention.

#### **CASE REPORT**

A 2 year old boy presented with itchy raised skin lesion over lower back, gluteal region, both elbows and both knees since 2 months of age. Scaly lesions were present on the scalp. On examination, multiple, erythematous scaly plaques were noted all over the body sparing face, palm and sole (Figure 1).



Figure 1: Multiple erythematous scaly plaques over gluteal region.

There is no family history of psoriasis and no maternal history of any drug intake. Biopsy was taken from buttock lesion. We received the skin biopsy measuring 0.5x0.5x0.5 cm. Microscopic examination showed epidermis with acanthosis, hyperkeratosis and parakeratosis with collection of neutrophils forming micro-munro abscesses. There was thinning of stratum

granulosa and regular elongation of rete ridges with bulbous ends. The dermal papillae showed blood vessels and chronic inflammatory cells (Figure 2 & 3). Histopathological diagnosis was Juvenile psoriasis.



Figure 2: Photomicrograph show acanthotic, hyperkeratotic, parakeratotic squamous epithelium with regular elongation of rete ridges. Superficial dermis show chronic inflammatory infiltrate (H&E, 4x, 10x).

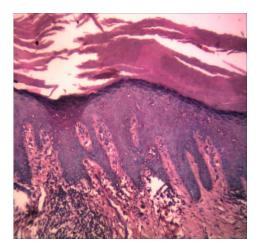


Figure 3: Photomicrograph show acanthotic, hyperkeratotic, parakeratotic squamous epithelium with regular elongation of rete ridges. Superficial dermis show chronic inflammatory infiltrate (H&E, 4x, 10x).

#### **DISCUSSION**

Childhood psoriasis is a well-known entity with rare occurrence. Its unique features are inflammation, chronicity and hyperproliferation. It is a relapsing papulo-squamous disorder with abnormal hyperproliferation of epidermis.<sup>3</sup> Plaque lesions found in childhood psoriasis are frequently pruritic, relatively softer, thinner and less scaly compared to adults.<sup>4</sup> Various other clinical presentations in childhood other than plaque type is guttate type, erythrodermic type, napkin and nail-based

disease.<sup>4</sup> Pustular psoriasis is rare in children.<sup>2</sup> Majority of the Indian studies show that children manifest the established plaque variety more often, rather than the guttate type.<sup>4</sup> Face and flexural involvement is more common with guttate psoriasis.<sup>2</sup> In about two-third cases of guttate psoriasis evidence of preceding streptococcal infection was found.<sup>3</sup> In our case, there was no involvement of face, and there was no history of streptococcal infection.

Childhood psoriasis is commonly associated with skin conditions like allergic contact dermatitis, vitiligo, eczema and alopecia areata. The disease is occasionally mistaken for neurodermatitis, dermatitis seborrheica and balanitis.<sup>4</sup>

In surveys from India, most children developed first symptoms at the age of 6 to 10 years.<sup>2</sup> A study of 419 patients from north India showed that the peak age of onset in boys was 6-10 year and for girls 10-14 year. A positive family history was present in only 4.5% patients.<sup>5</sup> In a study done by Manoharan et al. the incidence of childhood psoriasis was 17.15%. The youngest patient was a male child 2 & 1/2 years old. Among female children, the youngest patient was 3&1/2 years old.<sup>1</sup> In our case the patient's age at presentation was 2 years. This is the first case to be reported in that age group.

In a study of 137 patients from china, aged between 3 and 14 years, 8% had family history of psoriasis. Infection was the most common precipitating factor. In our case, there was no family history and preceding infection.

#### **CONCLUSION**

Though juvenile psoriasis is a well-known entity, its occurrence in 2 year old child is uncommon. Disease may be cleared by initial therapy but relapse is frequent. Early recognition and management of psoriasis in children is vital to prevent complications inherent to the disease.

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