Case report

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# Pityriasis Amiantacea – A Diagnostic Challenge

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## Abstract

Pityriasis amiantacea (PA) is a distinct papulosquamous condition of the scalp characterized by asbestos-like thick scales attached to the hair shaft. Its pathogenesis remains uncertain but represents a reaction pattern of the scalp to various inflammatory diseases. Reporting a case of PA in an eight year old girl who presented with difficult to treat dandruff. Awareness of its diagnosis is important while managing the such a case.

**Keywords:** Pityriasis amiantacea; Seborrheic dermatitis; Children.

## Introduction

Pityriasis Amiantacea (PA) (synonyms: Tinea amiantacea, asbestos scalp,) is an uncommon papulo-squamous condition of the scalp which presents with thick yellowish, silvery, asbestos-like scales attached to the hair shafts. This condition was first described as asbestos-like tinea by Baron Jean-Louis Alibert of France in 1832 [1]. Etio - pathogenesis of this condition remains unclear and it represents a reaction pattern of the scalp to various inflammatory diseases. In a clinical scenario this present usually as a recurrent or difficult to treat dandruff. Awareness of this condition in the differential diagnosis is important while managing such condition. We report a case of an eight –year – old girl who presented with difficult to treat dandruff and was diagnosed to have PA.

## Case report

An eight- year -old girl presented with the complaints of excessive dandruff of the scalp since two- three months. There was no h/o itching over scalp, lice infestation, skin rash or any systemic symptoms. She had been applying over the counter antidandruff shampoo without much relief. Family history revealed that her father had been treated in the past for psoriasis.

Scalp examination revealed massive thick, adherent, plate like, yellowish silvery scales, attached to the hair shafts, predominantly involving the fronto-parietal and vertex area [Figure 1]. Rest of the clinical examination was normal without evidence of any skin lesion or nail changes suggestive of fungal infection or psoriasis. Scalp skin and scale scraping for fungal elements with 10% Potassium hydroxide mount were negative.

She was diagnosed with **Pityriasis Amiantacea (PA)** and prescribed topical keratolytic solution (salicylic acid) along with corticosteroid preparation (Betamethasone Dipropionate 0.05%) and antibacterial cream. She responded to the above treatment in two to three weeks and the thick scales reduced significantly. She was advised to continue the medications for ten to twelve weeks. Over a period of one-and-half year, she had three episodes of relapse. Each episode was treated with the keratolytic, corticosteroid and an antibacterial cream.

## Discussion

Pityriasis Amiantacea (PA) is a distinct inflammatory condition of the scalp characterized by excessive scaling. The scales

***Figure 1:** Thick asbestos like scales adherent to the proximal hair shafts & scalp.*

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are yellowish, silvery thick, attached in layers to both the hair shafts and scalp. It primarily affects young adults and is more common in females [2]. The condition is a reaction pattern to a number of inflammatory processes in the scalp.

Psoriasis and seborrheic dermatitis appear to be the most common causes for PA. It may also be seen as a complication of tinea capitis, atopic dermatitis, lichen planus, bacterial infection, and pityriasis rubra pilaris [2, 4]. Staphylococcus aureus infection has also been documented in its pathogenesis [5]. The essential features responsible for the asbestos like scaling are diffuse hyperkeratosis and parakeratosis together with follicular keratosis, which surrounds each hair with a sheath of horn [6] .The lesions can involve localized areas or entire scalp and the scales on removal can lead to temporary or scarring alopecia.

Effective and timely treatment of PA is critical to avoid scarring alopecia. The treatment includes keratolytic agents for removal of thick scales and topical corticosteroids to reduce inflammation. As Staphylococcus aureus has been documented to be present in the majority of patients, a combined regime containing systemic antibiotics and coal tar shampoo is usually recommended [7]. In cases of unrelenting disease, systemic therapies including Tumor necrosis factor-alpha (TNF-α) inhibitors and Infliximab have been tried to prevent scarring alopecia and other associated morbidities [8, 9]. PA is usually difficult to treat effectively as the scales reaccumulate if not treated regularly. The patients require close observation and regular follow up due to the relapse or failure to the standard treatment and also progression to psoriasis in some cases [10]. This child had three recurrence over a period of one –and –half year follow up. In addition to the recurrent episodes and a family history of psoriasis she will need close observation.

## Conclusion

Pityriasis amiantacea should be considered in a differential diagnosis in a child presenting with massive and difficult to treat seborrheic dermatitis. It is a clinical diagnosis after ruling out fungal infection and other causes. Relapses should be kept under close observation for psoriasis.

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