

Idiopathic Eruptive Macular Pigmentation (IEMP): A Case Report and Review of Literature

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ABSTRACT

Idiopathic Eruptive Macular Pigmentation (IEMP) is a rare skin disorder of unknown etiology characterized by asymptomatic hyperpigmented macules and patches involving neck, trunks and proximal extremities.

Here we report an 8 year old boy who presented with 3 years history of asymptomatic slowly progressive brownish skin lesions that were not preceded by redness or any other skin lesions. Skin examination revealed multiple, non-scaly, brownish, macules over his trunk. Skin biopsy showed increased basal layer pigmentation. The dermis showed few pigment incontinence.

On the basis of the above clinic-pathological features, the diagnosis of IEMP was made. Parents were reassured and no treatment was done for the patient as the parents were satisfied with the reassurance. After 3 years of follow up, all skin lesions disappeared.

INTRODUCTION

Idiopathic eruptive macular pigmentation (IEMP) was first described by Degos et al. in 1978.¹ IEMP is an uncommon benign hyper-pigmented skin disorder of unknown etiology characterized clinically by asymptomatic, multiple, discrete, hyperpigmented macules that involve the trunk, proximal extremities, neck and face without preceding inflammation, ranging in size from 10 to 20 mm.²⁻⁴

It is common in children and adolescents with no sex prominence.^{4,5} The differential diagnosis of IEMP includes lichen planus pigmentosus, urticarial pigmentosa, postinflammatory hyperpigmentation, fixed drug eruption and ashy dermatosis (Erythema dyschromicum perstans (EDP)).⁶⁻⁸

Treatment of IEMP is unnecessary because the condition is self-limited, disappear spontaneously without any scarring in months to years in most cases.¹⁻⁸

CASE REPORT

An 8 year old healthy boy presented with 3 years history of multiple hyper-pigmented skin lesions over his trunk. The lesions were asymptomatic, gradually progressed and persistent. Review of systems and past medical history were unremarkable. No history of drug intake. There is no family history of similar condition and no consanguinity between the partners.

Keywords: Idiopathic Eruptive Macular Pigmentation, Idiopathic Eruptive Macular Hyperpigmentation, Ashy Dermatitis.

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General and systemic examinations were unremarkable. Skin examination revealed multiple, discrete, non-scaly, brownish, oval to round macules, measuring 1-2 cm in size over his trunk (Figure 1). Hair, nails, palms, soles and mucous membrane were normal. Hematological and biochemical investigations were normal.



Fig 1: Multiple, discrete, non-scaly, brownish macules on the back.

Skin biopsy showed increased basal layer pigmentation. The dermis showed few pigment incontinence (Figure 2). On the basis of the above clinic-pathological findings, a diagnosis of IEMP was made. Parents were reassured and no treatment was done for the patient as the parents were satisfied with the reassurance. After 3 years of the follow up, all skin lesions disappeared.

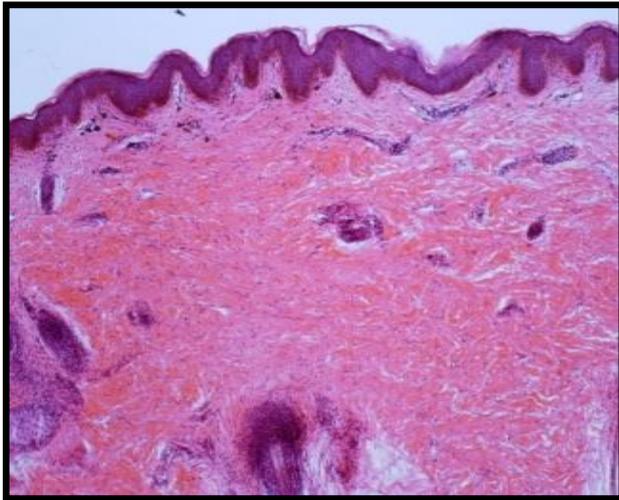


Figure 2: Skin biopsy showing increased basal layer pigmentation. The dermis shows few pigment incontinence.

DISCUSSION

The most important differential diagnosis of IEMP is EDP. EDP is an acquired chronic, progressive bluish to ash-gray hyperpigmentation that has been suggested by some authors to be a variant of lichen planus. There is a lack of consensus as to whether IEMP is a variant of EDP seen more commonly in children or a distinct entity. The skin lesions in both IEMP and EDP are characterized by multiple brownish macules and patches that have similar size and distribution. Both conditions affect trunk, neck and proximal extremities.¹ However, there are some differences between the two. These differences are shown in table 1.¹⁻⁸ Our case showed the classical clinical and histopathological features of IEMP. Recently, there were reports of IEMP that have velvety surface and papillomatosis histologically.²

CONCLUSION

IEMP is a rare benign hyper-pigmented skin condition of unknown etiology. Lesions are asymptomatic, multiple, brownish, oval to round macules involving neck, trunk and proximal extremities. The most important differential diagnosis of IEMP is EDP. The diagnosis of IEMP is confirmed by the classical clinical presentation. The skin biopsy finding may help in the diagnosis. There is no treatment for IEMP. IEMP is self-limited with complete resolution within months to years.

Table 1: Differences between Idiopathic Eruptive Macular Pigmentation (IEMP) and Ashy Dermatitis (EDP)

	Idiopathic eruptive macular pigmentation	Ashy dermatosis
Age	Affects primarily children and adolescents.	From childhood through adulthood.
Distribution	Worldwide.	Worldwide but most common in Latin America.
Association	Lack of exposure to a medication.	Sporadic case reports of temporal associations with: the ingestion of ammonium nitrate, benzodiazepines, or penicillin.
Clinical presentation	Asymptomatic. Round or oval brownish macules. Not preceded by inflammatory erythema.	Usually asymptomatic but can be mildly pruritic. Round or oval irregularly shaped gray-brown macules. Long axis can follow skin cleavage lines similar to pityriasis rosea. May be Preceded by inflammatory erythema.
Histopathology	Histopathology: few dermal melanophages, no vacuolar degeneration of basal layer, no lichenoid infiltrate.	Histopathology depend on the stage of the lesion. Older lesions show many dermal melanophages. Early lesions show lichenoid infiltrate and vacuolar degeneration of basal layer.
Prognosis	Spontaneous resolution after months to years.	Children: Spontaneous resolution after years. Adults: persistent.
Treatment	No effective treatment.	Successful treatment with dapsone and clofazimine has been reported.

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