Idiopathic eruptive macular pigmentation in a Chinese child

Zha Wei-Feng, Xu Ai-E, Chen Jun-Fan

Department of Dermatology, People's Hospital, Hangzhou, Zhejiang, China

ABSTRACT

We present a case of a healthy 8-year-old boy who presented with disseminated asymptomatic brown macules on the face, neck, trunk, and proximal extremities for 3 months. Dermatologic examination revealed multiple, smooth, nonscaly, brown macules involving the face, neck, trunk, and proximal limbs. The Darier's sign was negative. Histopathologic study showed normal epidermis and basal membrane, and increasingly scattered melanophages in the papillary dermis. The final diagnosis was idiopathic eruptive macular pigmentation.

Key words: Child, Chinese, Idiopathic eruptive macular pigmentation

INTRODUCTION

Idiopathic eruptive macular pigmentation (IEMP) is a rare skin disorder of pigmentation characterized by asymptomatic, scattered, brown macules involving the face, trunk, and proximal extremities. The lesions usually appear suddenly and gradually disappear over a few months to years without any treatment.[1] The vast majority of patients are children and teenagers. The first description of the disease was of a patient whose pigmentation lasted more than three decades.[2] We report the case of an 8-year-old boy who met all the clinical criteria for the disease.

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Address for correspondence:
Dr. Zha Wei-Feng, Department of Dermatology, Westlake Avenue 38, Hangzhou - 310 009, Zhejiang, China.
E-mail: zwfsun@126.com

CASE REPORT

An 8-year-old boy presented with brown pigmented macules on the face, neck, trunk, and proximal extremities that had appeared three months earlier. The child's parents denied any history of inflammatory erythema or any other skin disorder, drug medication, or exposure to harmful material. The lesions first appeared on the trunk and then gradually spread to the extremities, neck, and face. There were no significant changes in diet, sleep, or weight. The patient and other members of the family were otherwise healthy. General, physical and systemic examination was normal. Dermatologic examination showed multiple, scattered, smooth, nonscaly, round to oval, brown macules over the body sparing the palms and soles [Figures 1 and 2]. Hair, nails, and mucosae were normal. The Darier's sign was negative. Routine examination of the blood, urine, and stool, as well as liver and kidney function tests were within normal limits. Histopathologic examination revealed a normal epidermis and basal membrane, and a large number of melanophages in the papillary dermis [Figures 3 and 4]. Based on the clinical manifestations and histopathologic features, a final diagnosis of idiopathic eruptive macular pigmentation was made.

DISCUSSION

IEMP is a rare skin disease that primarily occurs in children and adolescents. The incidence is equal among the sexes, and the natural course ranges from a few weeks to years. Mehta *et al*., reported the case of a 24-year-old Indian female with IEMP since 21 years with one recurrence.[3] The youngest and oldest patients reported in the literature are a 1-year old female and a 50-years old male respectively.[2,4]

The characteristic of IEMP is the occurrence of asymptomatic, scattered, brown macules involving the neck, trunk, and proximal extremities. Milobratovic *et al*., reported the case of a white woman with IEMP associated with pregnancy and autoimmune thyroiditis.[5] Histopathologically, IEMP is characterized by an increase in melanin in the basal layer of the epidermis and melanophages in the dermis.

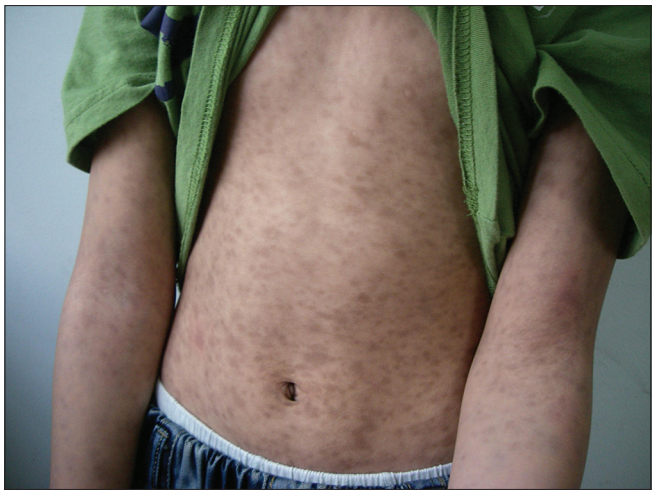

Figure 1: Brown disseminated macules over the trunk and proximal extremities

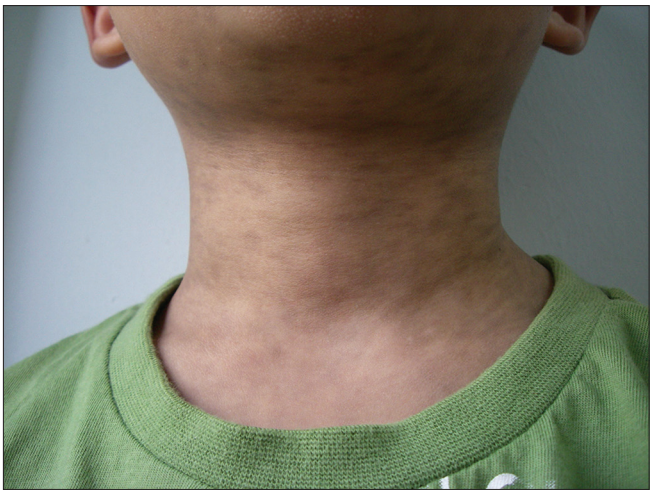

Figure 2: Characteristic macules on neck and face

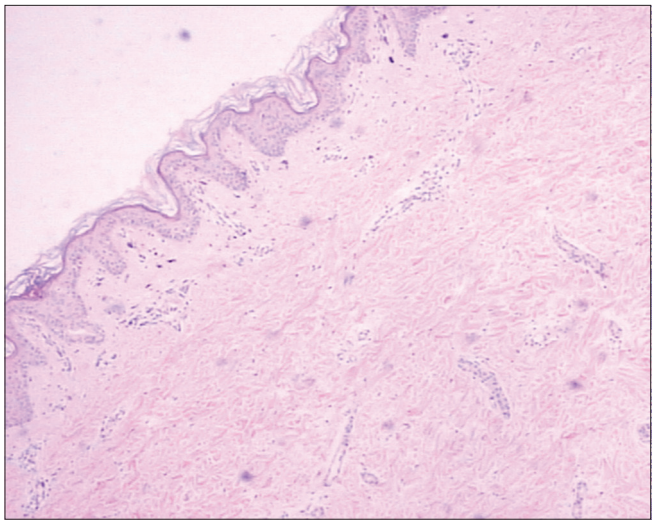

Figure 3: Normal epidermis (hematoxylin and eosin, original magnification ×20)

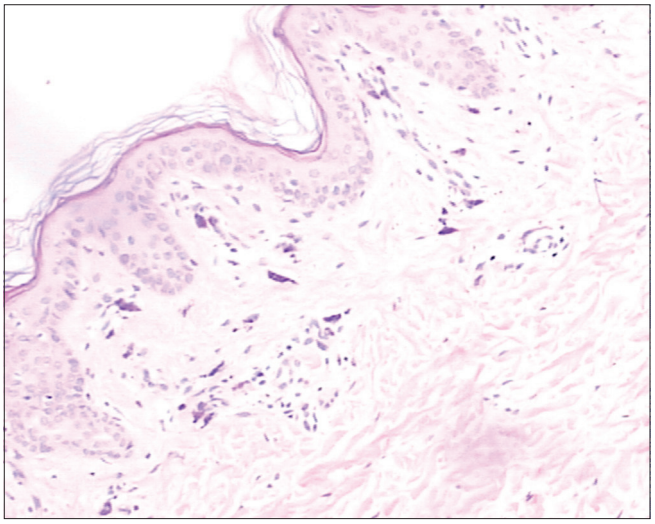

Figure 4: Melanophages in the papillary dermis (hematoxylin and eosin, original magnification ×200)

However, as these findings are non-specific, it is important to exclude the other conditions. Sanz de Galdeano *et al*., described criteria for the diagnosis of IEMP in 1996.[6]

IEMP must be differentiated from other diseases, namely, lichen planus pigmentosus, erythema dyschromicum perstans (EDP), urticaria pigmentosa, and fixed drug eruption. EDP, similar to IEMP, occurs mostly among Latin Americans with numerous, discrete, pigmented macules on the trunk and extremities; however, there is a preceding inflammatory erythema before pigmentation, and the lesions are relatively stable. Histopathology shows basal cell vacuolization and liquefaction with numerous melanophages scattered in the papillary dermis. The occurrence of papillomatosis has been also reported.[7-9]

Our case fulfilled the criteria for IEMP[6]. The condition is self-limiting and usually disappears spontaneously over months to years.[2] Long-pulse ruby laser has been found useful in the treatment of IEMP.

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