

UNILATERAL ACQUIRED DERMAL MELANOCYTOSIS ON EAR; A VERY RARE CONDITION

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Article Received date: 06 January 2025

Article Revised date: 27 January 2025

Article Accepted date: 16 February 2025



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INTRODUCTION

Dermal melanocytosis is mostly congenital and seen as grey/ bluish grey patches in newborns or first years of life in children as Mongol spot, which disappears in years. Ito nevus, Ota nevus, Hori nevus or Nevus of Sun in adults they persist and are characterized by melanocytes dissecting dermal collagen bundles in reticular dermis with or without melanophages.^[1]

Acquired dermal melanocytosis (ADM) is rare and presents with benign pigmented lesions mostly on face but extremities, limbs and moreover locations can be affected on the skin; having the same histopathological features of congenital dermal melanocytosis.^[2]

There are limited cases on literature about isolated ADM on ear.

CASE

A 52 year old woman presenting with grey pigmentation on the right helix-antihelix, ear lobe, post- and preauricular region, matching neither Ota nor Ito nevi localisation (Fig.1).

The pigmentation was first began 10 years ago and expanded to today. She had no likely pigmentation on the

other side of face and her body. She had history of 20 years pramipexole usage for restless leg syndrome and no neurological symptom or disease additively. The area of her pigmentation had no chemicals usage history and no direct sun exposure through she weared always a head-dress while being outside.

Her neurological examination was normal, no skin disesthesia/ paresthesia detected on the pigmented area. The complete blood count and routine biochemical tests were also normal.

Her dermoscopic findings were gray structureless patch with grey- brown dots (Fig.3).



Figure 1: Right auricle macroscopic view.



Fig. 2: Dermatoscopic review of pigmented auricle.

We performed punch biopsy with prediagnoses with drug induced pigmentation, ochronosis, melanosis;

histopathology revealed melanocytes and melanophages amongst dermal collagen bundles.(Fig.3)

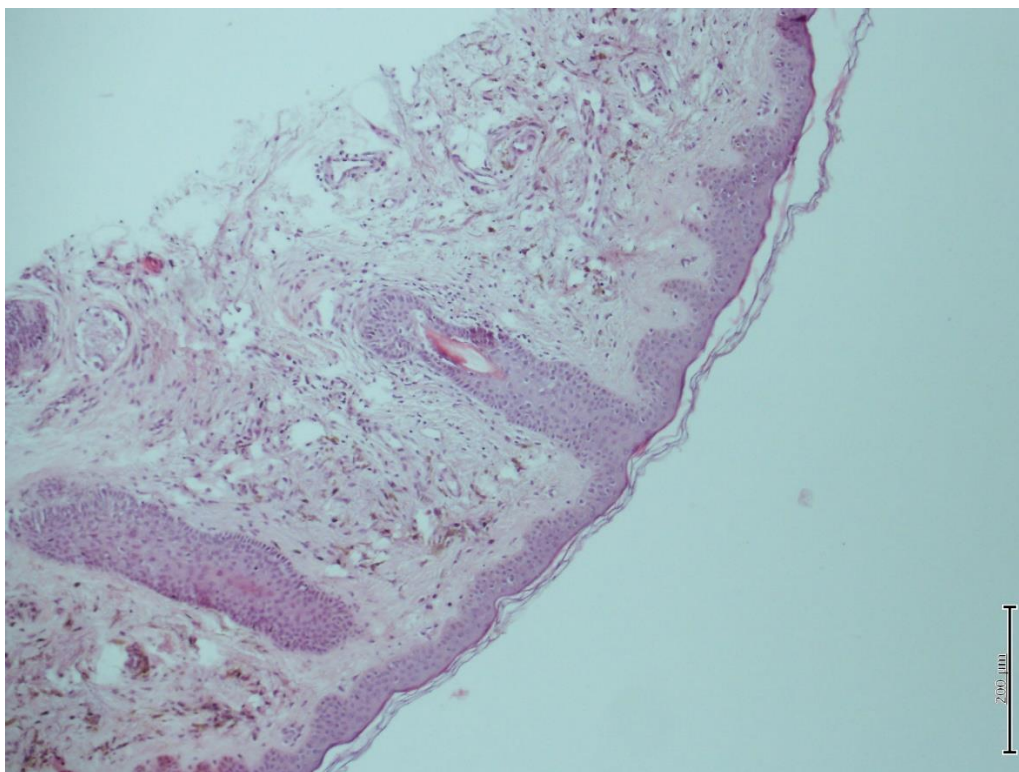


Figure 3: Histopathological appearance of melanocytes in dermis.

DISCUSSION

Dermal melanocytosis is characterized by intradermal dendritic melanocytes and may be either congenital or acquired. Congenital forms are Mongolian spot, localising mostly on lower back and buttocks, Ota nevus known as oculodermal melanocytosis which involves first and second branches of nervus trigeminus including mucosal areas, Ito nevus, named as nevus acromio-deltaoideus, involves the skin area innervated by the posterior supraclavicular and lateral brachial nerves. Mongolian spot is seen on birth or early weeks of life and disappears in months or years but the others may appear from birth to peripubertal age and they persist lifetime.^[1-3]

Acquired dermal melanocytosis is more rare as Hori nevus (acquired bilateral nevus of Ota-like macules-ABNOM-) or Nevus of Sun (acquired unilateral nevus of Ota).^[4,5] Our case did not fulfill the localisation and age of onset criteria of the described nevi below.

The mechanism of acquired dermal melanocytosis is not completely clear. There are three hypotheses about. The first hypothesis is that dermal melanocytes appear when migration of melanocytes from the neural crest fail to locate their proper layer in the epidermis. Second is; dermal melanocytes may be descend from the epidermis or migrate from follicular bulbs. Third hypothesis is the reactivation of immature- latent dermal melanocytes

triggered by trauma, inflammation, drugs or unknown factors.^[1-3]

The patient had no trauma, inflammation or chemical or sun exposure background on the effected area but only had medication history for 10 years with pramipexole.

It was not able to find any adverse effect report about pramipexole side effect of skin pigmentation. As a matter of fact, dopamine receptors in nerve system targeted by pramipexole are different from dopamine receptors on skin.

The patient diagnosed as acquired facial dermal melanocytosis.

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