

Case Report

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Acquired Melanocytic Nevus: An Unusual Case Presentation

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ABSTRACT

Acquired Melanocytic Nevi (AMV) are common benign pigmented skin lesions. There are three types which include junctional nevus, compound nevus and Intradermal Melanocytic Nevus (IMN). IMN are characterized clinically by dome-shaped, soft, fleshy papules and are seen commonly in adults. Herein we reported a case with an unusual large IMN. A 35 years old otherwise healthy male presented with history of asymptomatic skin lesion on his scalp of several years duration that started to get bigger within the previous few months prior presenting to us. Skin examination revealed solitary firm skin colored nodule measuring 1.5×1.5 cm on his scalp. Excesional skin biopsy revealed sharply-defined intradermal tumor composed of nests and fascicles of nevus cells. The tumor cells in superficial dermis are composed of epithelioid cells arranged singly and in clusters with heavy pigmentation in the superficial part. The deeper portion of the tumor is composed of bland looking spindle cells. No atypia or mitosis has been seen. Nerve corpuscles resembling Meissner corpuscles have also been seen in the deeper portions of the tumor. Histochemical analysis showed positivity for S100 and HMB-45. On the basis of the above clinicopathological findings, the diagnosis of intradermal melanocytic nevus was made and the patient was reassured.

KEYWORDS: Intradermal melanocytic nevus; Common melanocytic nevus; Acquired melanocytic nevus.

INTRODUCTION

Acquired Melanocytic Nevi (AMV) are benign proliferations of melanocytic cells (also known as nevus cells) that are characterized histopathologically by presence of nests of nevus cells in the dermoepidermal junction (junctional nevus), or in the papillary dermis (compound nevus) or deep in the dermis and subcutaneous tissues (Intradermal Melanocytic Nevus (IMN)).¹⁻³

The AMV in general increase in size and number with increase of age, and peak in the 3rd decade of life. They then start to regress over time, so by 7th decade they usually disappear. IMN are characterized clinically by dome-shaped, soft, 'fleshy' papules and are frequently found on the head and neck. Their sizes range from a few millimeters to ≥1 cm in diameter. The dermoscopic features of an intradermal nevus consist of focal globules or globular-like structures. In addition, there may be pale to whitish structureless areas and fine linear or comma vessels.³⁻⁵

CASE REPORT

A 35-year old otherwise healthy male presented with history of asymptomatic slowly progressing skin lesion on his scalp of several years duration that suddenly got bigger within

the previous months prior presenting to us. Past medical history and systematic review were unremarkable. Skin examination revealed solitary firm skin colored nodule measuring 1.5×1.5 cm on his scalp (Figure 1). Differential diagnosis of cylindroma, neurolimmoma, neuroma, neurofibroma, and schwannoma has been made. Excesional skin biopsy revealed sharply-defined intradermal tumor composed of nests and fascicles of nevus cells. The tumor cells in superficial dermis are composed of epithelioid cells arranged singly and in clusters with heavy pigmentation in the superficial dermis. The deeper portion of the tumor is composed of bland looking spindle cells. No atypia or mitosis has been seen. Nerve corpuscles resembling Meissner corpuscles have also been seen in the deeper portions of the tumor (Figure 2). Histochemical analysis showed positivity for S100 and HMB-45. On the basis of the above clinicopathological findings, the diagnosis of intradermal melanocytic nevus was made and the patient was reassured.

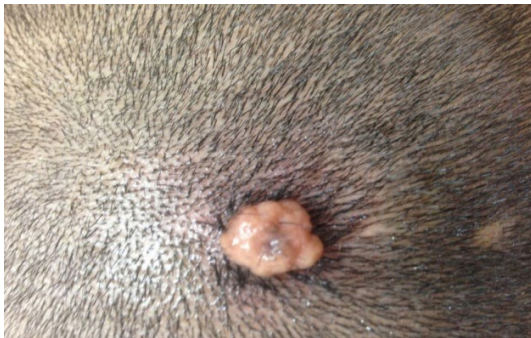


Figure 1: Skin colored firm exophytic nodule with smooth surface on the scalp measuring 2.5×2.5 cm.

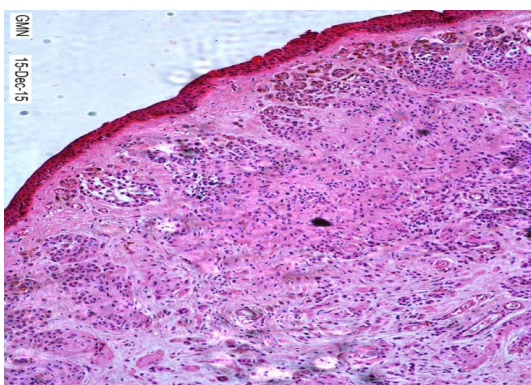


Figure 2: Skin biopsy showing intradermal tumor composed of nests of nevus cells. The tumor cells in superficial dermis are composed of epithelioid cells arranged singly and in clusters with heavy pigmentation in the superficial dermis. The deeper portion of the tumor is composed of bland looking spindle cells.

DISCUSSION

Nevocytes are cells that have epithelioid cell topography. Deep in the dermis, these cells show a diminished content of cytoplasm, giving a picture that resemble lymphocytes and are arranged in linear cords. More deeper, there will be a further transition to cells that assume a spindled configuration, similar to fibroblasts or Schwann cells. This process, which has been seen in the histopathology of our case, is known as normal mat-

uration of the benign melanocytic nevi. After the third decade of life, nevus maturation continues leading to destruction and replacement of nevus cells by fibrous or fatty tissue.² Our case showed positivity of cells for S100 and HMB-45 which indicate melanocytic origin of these cells.

Neurotized Melanocytic Nevi (NMN), previously known as Masson nevus, is one of the main histological differential diagnoses in our case. In NMN, all cellular components of the tumor are spindle shaped rather than epithelioid-like or lymphocyte-like in the superficial parts of the tumor.² Our case is unusual in its large size 1.5×1.5 cm in diameter.

The gold standard technique for removal of IMN, which is excision followed by histological examination, may result in a scar formation that is an undesired cosmetic outcome, a feature that did not happen in our case.⁶

CONSENT STATEMENT

Consent has been taken from the patient for purpose of using patient's photographs for publication in print or on the internet.

CONFLICTS OF INTEREST

The authors have no conflicts of interest that are directly relevant to the content of this clinico-pathological case. No sources of funding were used to assist in preparation of this manuscript.

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