



MEYERSON'S NEVUS: A HISTOPATHOLOGIST'S DILEMMA

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ABSTRACT Meyerson described a pigmented lesion with inflammation as Meyerson's nevus. Clinically it may mimic lesion of malignant melanoma, hence important to diagnose histopathologically. Here, we describe a case that presented us with a challenging differential diagnosis.

KEYWORDS : Meyerson's nevus, malignant melanoma.

INTRODUCTION:

Meyerson described a rare variant of melanocytic nevi with inflammatory, eczematous eruption in 1971[1]. Since then it has been described by various authors in both pediatric age group as congenital nevi and in adults as acquired melanocytic nevi[2]. We present this case of Melanocytic Nevi as a learning exercise because a high number of melanocytic nevi have been shown to be a risk factor for the de novo development of melanoma[3].

Case Report:

A 56 year old female presented with a small 0.3cm flat, slowly spreading, dark brown lesion with irregular margins on abdomen since 6 weeks[Figure 1a]. The lesion was slightly itchy with no prior history of pruritus or trauma. A differential diagnosis of Meyerson's nevus and Malignant melanoma was kept. Punch biopsies were done from the lesion and sent for histopathological examination in 10% buffered formalin. Routine processing was done for the skin biopsy and multiple 3mm sections were taken and stained with Hematoxylin and eosin for routine microscopy. The sections showed hyperkeratosis and parakeratosis. Proliferation of melanocytes in nesting pattern in the epidermis was seen, many of which had mild nuclear enlargement. Few apoptotic cells were also seen. Some of the melanocytes also showed presence of pigment. There was dense lymphocytic infiltrate at dermo-epidermal junction with pigment incontinence[Figure 1b]. Eosinophilic spongiosis was seen at few places[Figure 1c]. Mitosis was not seen. Multiple sections were examined to rule out any focus of malignant melanoma. With the clinical diagnosis and histopathological findings, a diagnosis of Meyerson's nevus was made.



Figure 1a

Figure 1a: Dermoscopy: A Dark Brown Colored Lesion With Irregular Margins.

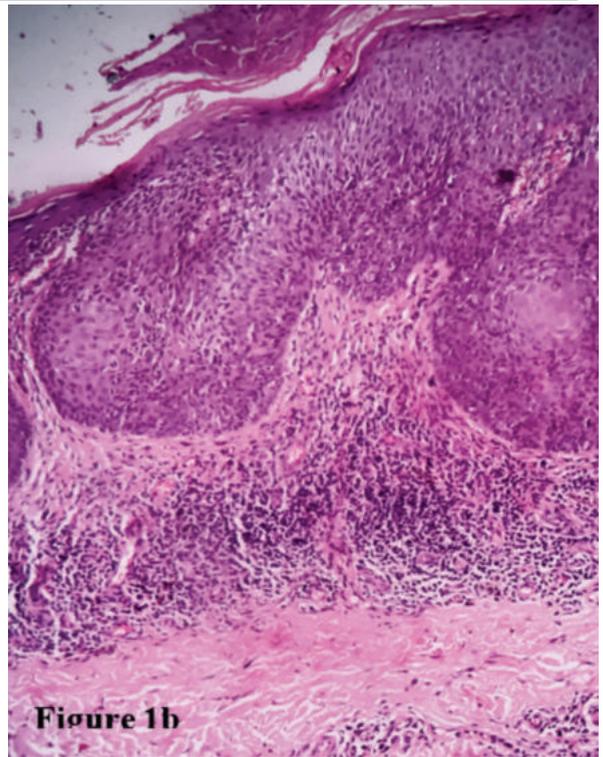


Figure 1b

Figure 1b: H&E, 100X: Marked Excoriation And Eczematization, Melanocytic Nesting In Epidermis And Diffuse Lymphocytic Infiltrate In The Upper Dermis.

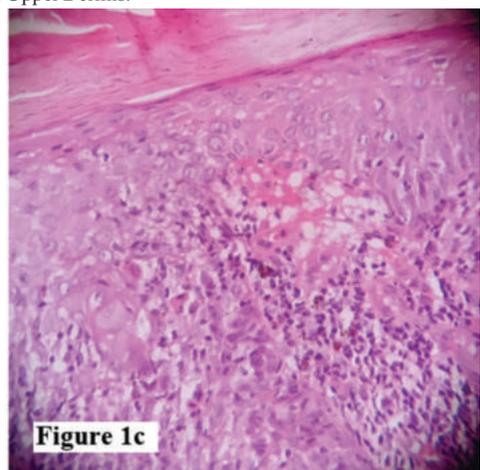


Figure 1c

Figure 1c: H&E, 400X: Spongiosis, Mild Eosinophilic Spongiosis, And Melanocytic Nests In The Epidermis.

DISCUSSION:

Meyerson's nevus has clinical presentation similar to several melanocytic conditions like Benign melanocytic nevi, Atypical nevi, Dysplastic nevi, Melanoma in situ, Malignant melanoma[4]. This makes careful histopathological examination of these lesions very important. Meyerson's nevus has been reported as symmetrical erythema and eczematization scale over localized melanocytic nevus[1]. Our patient had features of pruritus for around few weeks associated with the lesion. Any change of size, or color change or loss of symmetry must raise the suspicion of malignancy in these lesions[5]. In our patient, the lesion was increasing in size and had irregular borders making it highly suspicious of malignancy. Also, on microscopic evaluation, diffuse inflammatory reaction causes significant difficulty for pathologist to make a diagnosis. Examining multiple sections to separate this benign condition from malignant tumors with inflammation becomes extremely important. The exact pathogenesis for Meyerson's nevus is not completely understood. It is postulated that an autoimmune reaction against melanocytes mediated mainly by CD4,8 lymphocytes in response to upregulation of intercellular adhesion molecule-1 (ICAM.1) on keratinocytes is responsible for the inflammation and pigmentation[6]. In view of a differential diagnosis of melanoma, it becomes important to elicit a history of sunburn, any chemotherapy, laser therapy or treatment with interferon α . Brand et al and Pavlicic et al have reported that Ultraviolet radiation exposure after severe sunburn, Chemotherapy, therapy with Interferon. α 2B and Laser therapy act a trigger for Meyerson's phenomenon[7,8,]. Topical steroids with local surgical excision are the treatment of choice[9]. After resection no recurrence has been reported[10]. Our patient was lost during follow up, hence no comment can be made upon recurrence.

CONCLUSION:

Meyerson's nevus is not a well known entity. Not only is it rare but very limited information is available in the literature. Like in our patient, there was suspicion of malignancy it becomes important to keep this entity in mind and diagnose carefully with the help of clinical data. Studies including more number of patients would help to establish the pathogenesis of Meyerson's nevus and also provide clues to histopathologist in its diagnosis.

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