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MELANOACANTHOMA OVER THE FACE- A CASE REPORT

Dermatology

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ABSTRACT

Melanoacanthoma is an extremely uncommon cutaneous lesion that is made up of massive dendritic melanocytes and epidermal keratinocytes. It is regarded as a benign tumour. Melanoacanthoma commonly affects an elderly person over 60. It usually manifests as a single lesion on the head, neck, or trunk. Usually, it is an asymptomatic, slowly growing black or hyperpigmented cutaneous tumour. Although cutaneous melanoacanthomas (CM) might resemble melanoma in clinical appearance due to their pigmentation, a biopsy is usually performed to rule out malignancy. The presence of large, highly dendritic, melanin-rich melanocytes dispersed across an acanthotic epidermis is a hallmark histologic feature of CM. In the recent past, only a few instances of melanoacanthoma have been found documented in Indian literature. We describe one such instance of melanoacanthoma in a 64-year-old woman in this article.

KEYWORDS

Melanoacanthoma, cutaneous melanoacanthoma, seborrheic keratosis

INTRODUCTION:

Melanoacanthoma is a type of benign melanocyte and keratinocyte growth that is highly pigmented. Rather than being a unique condition, it is a very uncommon variation of seborrheic keratosis. The illness is more prevalent in those with fair skin. [1] Trauma, secondary colonization of melanocytes, and irritation-induced basal cell maturation into squamous cells—which prevents transfer of melanin to keratinocytes from melanocytes—are all causes of a melanoacanthoma.

It is usually not suspected as a possible diagnosis because the lesion has many clinical, dermoscopic, and confocal reflectance microscopy findings as that of a melanoma. A solitary pigmented lesion that is either new-onset or older and growing has to be primarily inspected visually. Usually, diagnosis can be confirmed with the help of a histopathological examination of the lesion. [2] Patients may wait decades to seek therapy because they are typically asymptomatic.

Case Report:

A 64-year-old female patient came to the dermatology out patient department with complaints of a single hyperpigmented raised lesion over her right cheek for the past one and half years. History of gradual increase in size was observed. The lesion was asymptomatic but complaints of occasional pain was present. Similar lesions were not noted elsewhere in the body. There was no history of itching, photosensitivity associated with the lesion.

There was no significant abnormality detected on systemic examination. On cutaneous examination, a single, hyperpigmented plaque measuring about 3 X 2cm was present over right side of cheek. It had a verrucous surface and was pedunculated in its margin over the medial side. (Figure 1) The lesion was firm in consistency. Mild tenderness was noted on palpation of the lesion. Examination of scalp, mucosa, palms and soles was found to be normal.

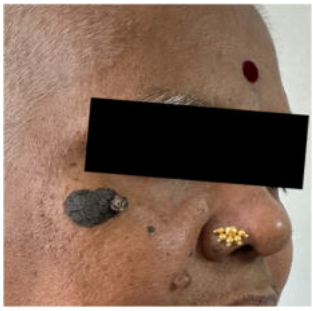

Figure 1 - A verrucous, hyperpigmented plaque with a pedunculated margin over the right side of cheek

A differential diagnosis of melanoacanthoma and pigmented variant of seborrheic keratosis were considered. An incisional biopsy was performed and send for histopathological examination which revealed hyperkeratosis, acanthosis and papillomatosis. (Figure 2) There was increased melanin pigment in the epidermis along with pigment incontinence and presence of melanophages in the upper dermis. (Figure 3) These findings were suggestive of a benign (non-melanotic) epidermal tumour like lesion which was correlating with the clinical diagnosis of Melanoacanthoma. A pigmented variety of seborrheic keratosis is not interchangeable with this tumour mass due to the huge number of melanocytes present, even deep within it, rather than limiting them to the basal layer. The patient was then referred to a plastic surgeon, who conducted full excision of the lesion with sufficient margins and suturing.

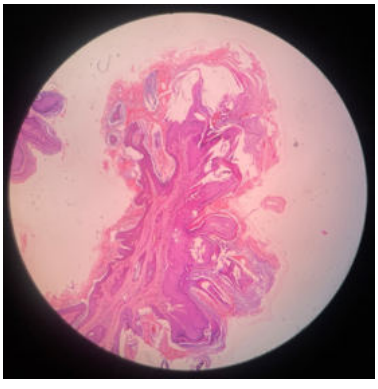

Figure 2- Scanner view(4X) with haematoxylin and eosin staining showing hyperkeratosis, acanthosis and papillomatosi

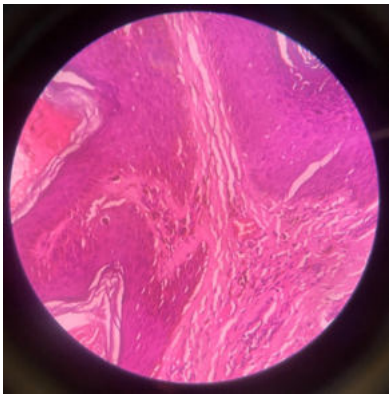

Figure 3- High power view(40X) with haematoxylin and eosin staining showing increased melanin pigment in the epidermis along with pigment incontinence and presence of melanophages in the upper dermis.

DISCUSSION:

It has long been believed that cutaneous melanoacanthoma (CM) is a highly pigmented form of seborrheic keratosis (SK). [3] Melanoacanthoma was first used in 1960 by Mishima Y and Pinkus H. Bloch (1927) classified it as naevoid epithelioma type 1, distinct from the common pigmented version of seborrheic keratosis or Melano epithelioma Type 2. [4] With no apparent sex discrimination, CM typically affects older people, with an average age of involvement between 55 and 65. More often than not, white people are impacted compared to black people.

Although a reactive process has been suggested by some, the exact aetiology of melanoacanthoma remains unknown. One common aspect of reactive processes is the identification of dendritic melanocytes secondarily colonizing nonmelanocytic lesions. These pigmented cells observed in melanoacanthoma at all epidermal layers may be the result of dendritic melanocyte invasion.[2] While the majority of people believed that CM was a benign mixed tumour of melanocytes and keratinocytes, other authors have proposed that it could actually be a reactive phenomenon brought on by trauma or local irritation, particularly on the lips.

Clinically, it appears as an asymptomatic, slowly-growing, hard, round to oval, papule, or nodular lesions that are highly pigmented, firm, and have a verrucous surface. These lesions are typically observed on the head, especially the lips, and the trunk. [5] Contact against surrounding skin or clothing can cause a lesion to become painful and inflamed. A bigger melanoacanthoma may infrequently spontaneously ulcerate or infect superficially. Disorders that need to be distinguished from CM include melanoma, melanocytic nevus, spitz nevus, basal cell carcinoma, actinic keratosis, seborrheic keratosis, verruca vulgaris and squamous cell carcinoma.

Based on certain research findings, melanoacanthoma resembles a pigmented Spitz nevus in terms of its dermoscopy, which has a starburst pattern with uniformly spaced pigmented streaks around the periphery. It has been determined that this pattern is indicative of a pigmented Spitz nevus. A dermoscopy of melanoacanthoma may reveal features of melanoma, such as granularity, multiple black-to-brown spots, multiple globules, blue-white veil, and grey to whitish hyperkeratotic regions.[2]

Melanoacanthoma is histologically described as a proliferation of melanocytes and keratinocytes confined to the epidermis. Melanocytes are distributed unevenly throughout the lesion. In the clonal type, on the other hand, melanocytes and keratinocytes are grouped in small nests. Studies using electron microscopy have shown that there is a malfunction in the melanin transfer from these very dendritic melanocytes to the keratinocytes. Studies using immunofluorescence and immunoprecipitant techniques have demonstrated that while melanoacanthomas are unrelated to malignant melanomas, treatment options include cryotherapy or conventional excision. [6] Other treatments under evaluation for the treatment of melanoacanthoma include cryotherapy, topical 5-fluorouracil 5% cream, laser ablation, and curettage. [7]

CONCLUSION:

Melanoacanthoma is an uncommon benign tumour of the epidermis, but it's exact incidence is unknown. We can distinguish the removed lesion from melanoma owing to its histopathology. But when a biopsy specimen arrives, the diagnosis usually consists of either seborrheic keratosis or melanoma, or both. Seldom does the evaluating clinician take melanoacanthoma into account. It is advised to remove the melanoacanthoma completely because partial removal may lead to persistent lesion. Ultimately, the primary goal of this study is to educate doctors about the likelihood of melanoacanthoma in a clinical presentation resembling this and to emphasize the significance of distinguishing such lesions from melanoma.

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