



**ORIGINAL RESEARCH PAPER**

**Dermatology**

**PIGMENTED PUZZLE: MELANOACANTHOMA MASQUERADING AS MELANOMA**

**KEY WORDS:**

Melanoacanthoma, Seborrheic keratosis, Pigmented lesion, Malignant melanoma mimic

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**ABSTRACT**

**Background:** Seborrheic keratosis is a common benign epidermal lesion with several histopathological variants. Melanoacanthoma is a rare variant characterized by the proliferation of both melanocytes and keratinocytes, often presenting as a deeply pigmented lesion that can clinically mimic malignant melanoma. **Objective:** To highlight the diagnostic challenge posed by melanoacanthoma due to its atypical pigmentation and resemblance to melanoma, emphasizing the importance of histopathological confirmation. **Case Presentation:** A 54-year-old male presented with a long-standing hyperpigmented plaque over the left leg, which showed recent changes including increased size, central verrucous growth, pain, itching, and occasional bleeding. Clinical differentials included melanoacanthoma, keratoacanthoma, and seborrheic keratosis with possible malignant transformation. dermoscopic and histopathological examination were consistent with features of melanoacanthoma. The patient responded well to a combination of cryotherapy and topical 5-fluorouracil after declining surgical excision. **Conclusion:** Melanoacanthoma, though benign, can clinically resemble malignant melanoma, posing a diagnostic dilemma. This case underlines the importance of biopsy and histopathological evaluation in pigmented lesions to avoid misdiagnosis and ensure appropriate treatment.

**INTRODUCTION:**

Seborrheic keratosis is a common benign epidermal lesion. Melanoacanthoma is an uncommon variant of seborrheic keratosis characterised by benign proliferation of deeply pigmented melanocytes and keratinocytes. The diagnosis of melanoacanthoma can be challenging as it clinically resembles malignant melanoma and requires high degree of clinical suspicion.

**CASE REPORT:**

A 54-year-old male presented with complaints of an asymptomatic hyperpigmented plaque over the left leg for the past 10 years, which over the past 3 months progressively increased in size with a central verrucous growth associated with pain, itching, and occasional bleeding. On examination, a hyperpigmented well defined verrucous plaque with a tender central exophytic growth was present over left leg (figure 1 A and B). Inguinal lymph nodes were not enlarged. Clinically, differential diagnosis of Melanoacanthoma, Keratoacanthoma and Seborrheic keratosis with squamous cell carcinoma were made and the patient was advised a skin biopsy. Dermoscopic examination showed cerebriform pattern, moth-eaten borders, crypts and fissures (figure 2). Histopathological examination showed hyperkeratosis, acanthosis, horn cysts and increased basal pigmented layer which were consistent with a diagnosis of melanoacanthoma, a variant of seborrheic keratosis (figure 3 A and B). Patient was advised surgical excision and as he was not willing for the procedure, he was started on cryotherapy with topical 5-Fluorouracil. Patient showed good response to therapy with regression of the central exophytic growth. (Figure 4 A and B)

**DISCUSSION:**

Seborrheic keratosis are benign epidermal skin lesions increasing in frequency and size as the age progresses, with well-defined borders with characteristic stuck on appearance.

It has several histopathological variants, 1.Acanthotic, 2.Hyperkeratotic, 3.Reticulate or adenoid type, 4.Melanoacanthoma, 5.Inflamed or irritated type and 6.Clonal type. Melanoacanthoma –is a rare variant of seborrheic keratosis characterised by increased keratinocytes and melanocytes containing the bulk of

melanin throughout the lesion.<sup>[1]</sup> Cutaneous melanoacanthoma manifests as a solitary pigmentary lesion occurring in adulthood, clinically resembling melanoma.<sup>[2,3]</sup>

Dermoscopic features include features of seborrheic keratosis with melanoma specific features such as blue-white veil, atypical dots, granularity and polymorphous vessels seen sometimes emphasising the need for biopsy to differentiate from malignant melanoma.<sup>[4,5]</sup> Histological examination of melanoacanthoma shows acanthosis, hyperkeratosis, horn cysts with large, dendritic melanocytes containing variable amounts of melanin scattered throughout the tumour in two types, 1.Diffuse type and 2.Clonal type.<sup>[1,4]</sup>

Prognosis is good with treatment being carried out through cryotherapy, curettage, shave excision, laser vaporization and electrodesiccation.

**CONCLUSION:**

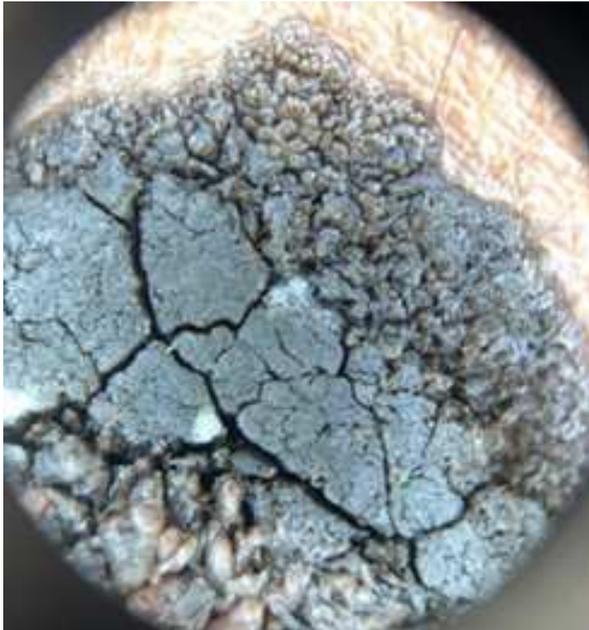
This case is being presented for its rarity and clinical suspicion of a malignant lesion in a benign condition warranting the need for biopsy for the appropriate management of the lesion.



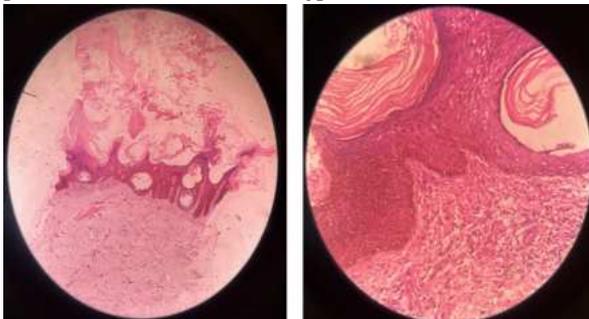
**Figure 1(A) -** hyperpigmented well defined verrucous plaque with a tender central exophytic growth.



**Figure 1(B) -** hyperpigmented verrucous plaque in horizontal plane.



**Figure 2** - Dermoscopic examination showing cerebriform pattern, moth-eaten borders, crypts and fissures.



**Figure 3(A)** - Histopathological examination – scanner view showing hyperkeratosis, acanthosis, horn cysts and increased basal pigmented layer.

**Figure 3(B)** - Histopathological examination – high power view showing horn cysts and increased basal pigmented layer



**Figure 4(A)** - Image showing initial presentation of the lesion.

**Figure 4(B)** - Image of the lesion after 1 month of treatment with cryotherapy and topical 5-Fluorouracil.

**Conflicts Of Interest:** Nil

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uncommon condition. Indian Dermatology Online Journal. 2013 Apr 1;4(2):119-21.  
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