

A Rare Presentation Over An Uncommon Location: Melanoacanthoma

T.V. Narasimha Rao, MD, R. Neelakanta Babu, MD

Address: Department of D.V.L, Guntur Medical College, Guntur, Andhra Pradesh, India
E-mail: neelchowdary4skin@hotmail.com

* Corresponding Author: Dr. Neelakanta babu, Department of D.V.L, Guntur Medical College, Guntur, Andhra Pradesh, India

Published:

J Turk Acad Dermatol 2015; 9 (4): 1594c5

This article is available from: <http://www.jtad.org/2015/4/jtad1594c5.pdf>

Keyword: Melanoacanthoma

Abstract

Observation: Melanoacanthoma is very rare variant of seborrheic keratosis presenting as a deeply pigmented benign proliferation of melanocytes and keratinocytes usually presenting over the head, neck and trunk of elderly people. A 40-year-old male presented with a solitary leaf shaped, slow growing asymptomatic hyperpigmented outgrowth with cerebriform surface measuring 6 cm by 4 cm over the right groin since the past 20 years. External genitalia were normal and there was no associated lymphadenopathy. The histopathology revealed hyperkeratosis, papillomatosis, acanthosis with presence of melanocytes at all levels of epidermis with abundant melanin. The epidermis showed squamous and basaloid cells with several horn cysts giving the diagnosis of melanoacanthoma. The patient further underwent surgical excision of the lesion. The case is being reported for its rarity, unusual location and clinical resemblance to a verrucous carcinoma as well as a benign wart.

Introduction

Melanocytic lesions have always a bewildering array of diagnostic problems for the dermatologist. Cutaneous melanoacanthoma is a painless, slow-growing, benign, mixed neoplasm composed of melanocytes scattered throughout keratinocyte lobules, rather than being limited to the basal layer of these lobules [1]. The term melanoacanthoma was introduced by *Mishima* and *Pinkus* in 1960 to designate a benign skin tumor that consisted of proliferating melanocytes and keratinocytes [2]. Although the keratinocytes contain melanin, the bulk of the pigment is present within melanocytes, many of which also have long dendrites. The condition is more commonly seen in light skinned and manifests as pigmented papules, plaques, cutaneous

horns or nodules mainly on the head, particularly the lips, and the trunk [3]. Patients are generally asymptomatic and may wait for decades before they seek treatment.

Case Report

A 40 year-old male patient, who is bus conductor by occupation, came to our outpatient department with a leaf shaped growth over the right groin for the past 20 years. For the past two months he is having a feeling of heaviness while walking, otherwise the lesion had remained largely asymptomatic. The growth started insidiously as a small pigmented leaf shaped raised lesion in the right groin and increasing very slowly to attain the present size. There was no bleeding from the lesion. The patient was an occasional alcoholic since the



Figure 1. A soft neem leaf shaped structure in the right groin



Figure 2 . Lesion extending downwards into the perineum

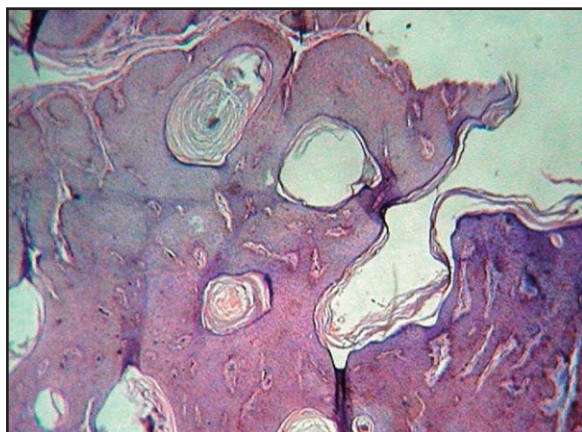


Figure 3. Histopathology showing horny cysts

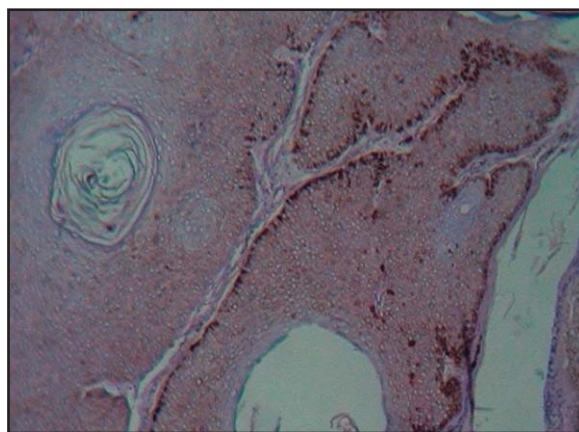


Figure 4. HPE showing abundant melanocytes

past 30 years. There were no concomitant co-morbidities. There was no history of sexual promiscuity in either spouse.

Examination revealed a soft neem leaf shaped structure in the right groin region extending downwards into the perineum measuring 6×4 cms (**Figures 1 and 2**). The growth was soft in consistency, mobile, and non-tender. The surface of the lesion is cerebriform. External genitalia were normal. There was no lymphadenopathy. Mucous membrane examination was normal. Other sites on the body were also normal. A differential diagnosis of pigmented seborrheic keratosis, verrucous warts and verrucous carcinoma were considered. All the laboratory investigations including routine hematological and biochemical investigations comprising hepatic and renal profiles and urine examination were within normal limits. VDRL and HIV testing of the patient were non-reactive. Biopsy was done and histopathology of the lesion showed marked hyperkeratosis, papillomatosis, acanthosis and with sharp horizontal demarcation from the dermis with presence of melanocytes at all levels of epidermis with abundant melanin. The

epidermis showed squamous and basaloid cells with several horn cysts (**Figures 3 and 4**). Thus a diagnosis of melanoacanthoma was made based on the above histopathological findings. Under strict aseptic conditions, the lesion was surgically excised and suturing was done.

Discussion

Melanoacanthoma is a rare cutaneous tumor. Melanoacanthoma can be found both on the skin and on the oral mucosa. Although most authors consider cutaneous melanoacanthoma a benign tumor of melanocytes and keratinocytes, some have suggested that it may be a reactive phenomenon induced by localized trauma. The lesions are usually solitary and common sites are the head, neck, trunk, often on the lip or the eyelid [3]. Histologically melanoacanthoma is a proliferation of keratinocytes and melanocytes localized to the epidermis.

The presence of large number of melanocytes even deep into the tumor mass instead of restricting itself to the basal layer differentiates it from a pigmented variant of seborrheic keratosis. In this case, the lack of koilocytes ruled out verrucous warts and the absence of cellular atypia did not favor verrucous carcinoma.

Two histological types of melanoacanthoma have been described: (a) diffuse type where melanocytes are scattered unevenly throughout the lesion as was seen in this case and (b) clonal type where melanocytes and keratinocytes are clustered in small nests [3]. Electron microscopic studies have revealed that there is a defect in the transfer of the melanin from these highly dendritic melanocytes to the keratinocytes. Immunofluorescent and immunoprecipitin studies have shown that melanoacanthomas are not related to malignant melanomas and hence simple excision or cryotherapy is curative [4].

Oral melanoacanthomas are rare reactive mucosal lesions that demonstrate hyperplasia of spinous keratinocytes and melanocytes and are unrelated to the seborrheic keratosis [5].

There have been very few reports of atypical presentations of melanoacanthoma. Vasani et al reported a case of melanoacanthoma over left inguinal region of 15 cm by 8 cm size in a 62-year-old male patient [6]. Noronha, et al. reported a case of multiple genital and perianal melanoacanthomas [7]. Shankar, et al. reported a case of giant melanoacanthoma occurring in a 65-year-old farmer presenting as a painful verrucous itchy plaque, 10 cm by 5 cm on the left side of the lower back of five years duration, mimicking melanoma [8]. The

other Indian report by Shenoy et al. showed multiple lesions of maximum diameter 6 cm on the lower back, abdomen, inner thighs and external genitals [9].

We published this report because of the rarity and the unusual site of occurrence and clinical resemblance to verrucous wart.

References

1. Mackie RM, Quinn AG. Non-melanoma skin cancer and other epidermal skin tumours. In: Burns T, Breathnach S, Cox N, Griffiths C, editors. Rook's Textbook of Dermatology. 7th ed. Oxford: Blackwell Publishing 2004. p. 36.1-36.50.
2. Mishima Y, Pinkus H. Benign mixed tumor of melanocytes and malpighian cells. Melanoacanthoma: Its relationship to Bloch's benign non-nevoid melanopithelioma. Arch Dermatol 1960; 81: 539-550. PMID: 14422903
3. Schwartz RA, Kihiczak GG. Cutaneous melanoacanthoma. Available from: <http://emedicine.medscape.com/article/1061812-overview>.
4. Schlappner OL, Rowden G, Philips TM, Rahim Z. Melanoacanthoma. Ultrastructural and immunological studies. J Cutan Pathol 1978; 5: 127-141. PMID: 210197
5. Fornatora ML, Reich RF, Haber S, Solomon F, Freedman PD. Oral melanoacanthoma: A report of 10 cases, review of the literature, and immunohistochemical analysis for HMB-45 reactivity. Am J Dermatopathol 2003; 25: 12-15. PMID: 12544093
6. Vasani RJ, Khatu SS. Melanoacanthoma: Uncommon presentation of an uncommon condition. Indian Dermatol Online J 2013; 4: 119-121. PMID: 23741670
7. Noronha TM, Girisha BS, Kishanprasad HL, Fernandes MS. A rare case of multiple genital and perianal melanoacanthomas. Indian J Dermatol Venereol Leprol 2012; 78: 202-204. PMID: 22421661
8. Shankar V, Nandi J, Ghosh K, Ghosh S. Giant melanoacanthoma mimicking malignant melanoma. Indian J Dermatol 2011; 56: 79-81. PMID: 21572799
9. Shenoy MM, Teerthanath S, Bhagavan KR. Genital and perianal melanoacanthomas. Int J Dermatol 2007; 52: 109-110.