

## SkIndia Quiz 11

# Pigmented plaque on abdomen

Vishalakshi S. Pandit, Arun C. Inamadar, Aparna Palit

Department of Dermatology, Venereology and Leprosy, SBMP Medical College, Hospital and Research Centre, BLDE University, Bijapur, Karnataka, India

A 60-year-old female patient presented with dark slow growing plaque on the abdomen since 5 years. The lesion initially was asymptomatic, and recently it was associated with itching. No history of bleeding, discharge, or ulceration of the lesion or any systemic complaints, and no history of similar complaints in the family was found.

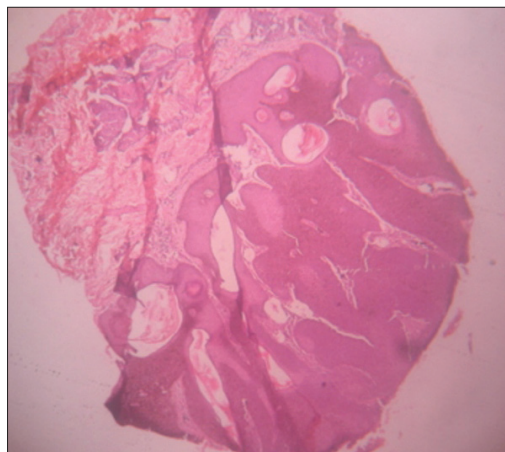
Clinical examination revealed single, well-circumscribed, darkly pigmented,

rough-surface (cribriform surface) indurated plaque of around 5 cm diameters, present on the abdomen [Figure 1]. Hair, nail, mucous membranes, general physical and systemic examinations were normal. A punch biopsy from the nodule was done. The histopathological features from hematoxylin and eosin-stained tissue section are shown in [Figures 2a and b].

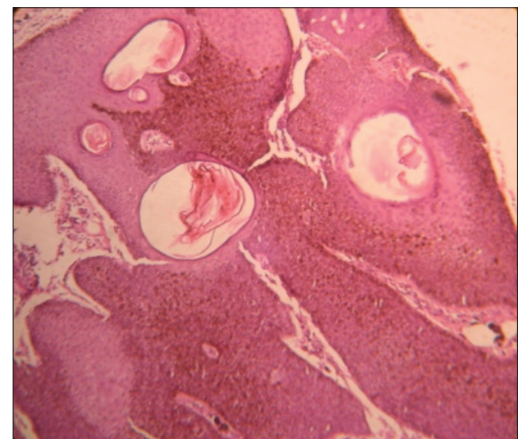
### WHAT IS THE DIAGNOSIS?



**Figure 1:** Single, well-circumscribed pigmented, hard plaque on abdomen



**Figure 2a:** Epidermis shows acanthosis and papillomatosis (H and E, ×10)



**Figure 2b:** Most of the cells have basaloid cell appearance with interspersed horn cysts filled with keratin. Many melanocytes scattered throughout tumor lobules. (H and E, ×40)

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Address for

correspondence:

Dr. Arun C. Inamadar,  
Department of Dermatology,  
Venereology and Leprosy, SBMP Medical College, Hospital and Research Centre, BLDE University, Bijapur, Karnataka, India.  
E-mail: [aruninamadar@gmail.com](mailto:aruninamadar@gmail.com)

## ANSWER

### Melanoacanthoma

Melanoacanthoma was originally described by Bloch as “non-nevoid melanoepithelioma type 1” and later the term “melanoacanthoma” first coined by Mishima and Pinkus in 1960.<sup>[1]</sup> It was considered as benign pigmented lesion consists of both melanocytes and keratinocytes. The current view is that it is a rare pigmented variant of seborrheic keratosis rather than a distinct entity.<sup>[2]</sup> It usually occurs in elderly individuals; has no sex predilection and more often found in Caucasian patients than in other races.<sup>[3]</sup> It presents clinically as asymptomatic, slow growing, deeply pigmented, well-demarcated, verrucous nodule or plaque, most commonly found on the head, and trunk. Occasionally, it may present as cutaneous horn.<sup>[4]</sup> Usually single, rarely multiple lesions may appear. The size of lesions varies with a diameter from few millimeters to several centimeters. Rare sites of involvement include buttocks, lower parts of limbs, eyelids, external auditory canal, genital, and perianal region.<sup>[3]</sup>

Histopathologically, it is characterized by numerous well-defined islands of small basaloid cells intermingled with large dendritic melanocytes spread throughout the dermis.<sup>[2]</sup> The epidermis is usually acanthotic, hyperkeratotic, and small horn pearls are also seen. Cytological atypia is absent. It is easily differentiated from other variants pigmented seborrheic keratosis by diffusely scattered large, dendritic melanocytes throughout tumor lobules in the melanoacanthoma, whereas melanocytes are restricted to the basal layer of epidermis in the later. Two histological variants of melanoacanthoma have been described: a diffuse type in which melanocytes are unevenly scattered throughout the lesion and a clonal type, wherein melanocytes and keratinocytes are found clustered in small nests.<sup>[5]</sup>

Under electron microscopy, partial or complete disruption of melanin transfer from the highly dendritic melanocytes to neighboring keratinocytes is found.<sup>[6]</sup>

Clinical differential diagnoses of melanoacanthoma are malignant melanoma and pigmented BCC. The slow growth pattern, the absence of variation of pigmentation in the lesion and infrequent occurrence of bleeding and ulceration differentiates melanoacanthoma from malignant melanoma. Dermoscopy helps in differentiating it from malignant melanoma, by the presence of cribriform pattern of ridges and the absence of brown globules, black dots, pseudopods, or depigmentation.<sup>[7]</sup>

Melanoacanthoma is easily differentiated from pigmented BCC as the later have an irregular rolled edge, a thin shiny epidermis with telangiectases and a depressed or ulcerated center.

There is paucity of literature on melanoacanthoma progressing into non-melanoma skin cancer. A retrospective study on seborrheic keratosis has shown that 5.3% of the seborrheic keratosis progress into non-melanoma skin cancer.<sup>[8]</sup>

No effective medical treatment is available; since it is benign growth, surgical excision is curative. Curettage, cryotherapy, and laser ablation are the other modalities of the treatment for melanoacanthoma.

### Learning points

- Melanoacanthoma is a benign, pigmented variant of seborrheic keratosis
- Clinical clues to diagnose melanoacanthoma are slow growth pattern, homogenous pigmentation of lesion, and stucco-on appearance
- Dermoscopy and histopathology help in differentiation of melanoacanthoma and malignant melanoma.

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