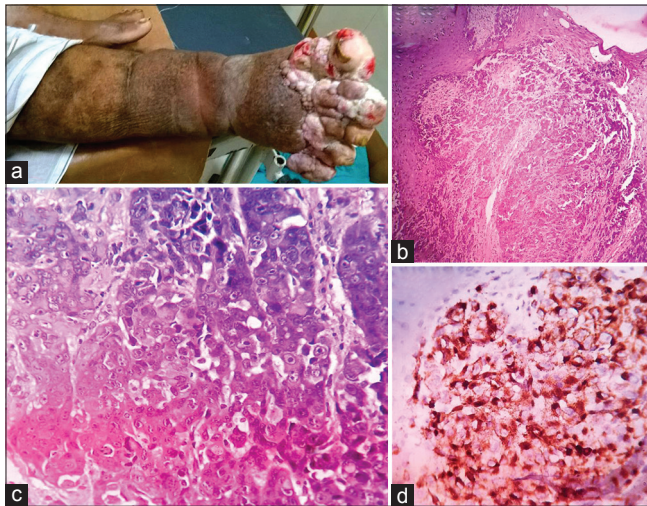


## Unsuspected Amelanotic Melanoma in an Elephantiasis Foot

Sir,

We present a case of a 70-year-old male patient with gradually increasing edema of right foot since 25 years. An ulcerated nodule was also present since 4 months with pus discharge and bleeding. The right foot and leg was grossly edematous with dermal thickening and discoloration. An ulcer of about 10 cm × 6 cm in the forefoot involving the digits was noted. The margins were having raised everted edges with slough on the floor and an indurated base. Surrounding area also had multiple nodules with fine papillary surface and variable areas of ulceration [Figure 1a]. A biopsy was taken from one of the nodules and sent for histopathology with the possible differential diagnosis of lymphomatosa nodosa verrucosa cutis, tuberculosis verrucosa cutis, and chromoblastomycosis. Microscopic examination showed nests of large epithelioid to spindle-shaped cells [Figure 1b] with hyperchromasia and high nucleocytoplasmic ratio [Figure 1c]. Most of the cells had a single prominent large macronucleoli and displayed frequent mitosis. Some of these nests were invading into the epidermis. The Breslow thickness >4 mm depth was recorded, as the tumor nests were going deep into the reticular dermis. Histopathologically, possibility of amelanotic melanoma and poorly differentiated squamous cell carcinoma was kept. The diagnosis of melanoma was further confirmed



**Figure 1:** (a) The right leg and foot shows elephantiasis with the presence of multiple nodules in the foot. (b) The nests of hyperchromatic tumor cells are seen throughout the dermis. The epithelium shows hyperkeratosis and papillomatosis (hematoxylin and eosin stain ×100 magnification). (c) The tumor cells are epithelioid shaped, hyperchromatic nuclei with prominent macronucleoli (hematoxylin and eosin stain ×400 magnification). (d) Immunohistochemistry showing strong expression of HMB45 (immunohistochemistry: avidin–biotin method with DAB chromogen and hematoxylin counterstain, ×400 magnification)

on immunohistochemistry as the tumor cells strongly expressed HMB45 [Figure 1d] and were negative for pan cytokeratin.

On contrast-enhanced computed tomography abdomen, a hypodense lesion of about 3 cm size was visualized on intravenous contrast without peripheral enhancement in right lobe of liver (Segment 7). On noncontrast computed tomography chest, multiple nodules were seen in bilateral lung fields with bilateral hilar lymphadenopathy suggestive of metastasis. The patient was simultaneously referred to a higher center for chemotherapy.

Lymphedema is known to impair the local circulation of immune cells due to chronic lymphatic stasis. This region becomes immunologically vulnerable putting the patient at risk for the development of malignancy. Besides this general immune suppression within the skin, the formation of collateral lymphatic and vascular vessels in response to lymphedema produces an environment rich in growth factors, which may also play a role.<sup>[1]</sup>

Amelanotic acral melanoma is a very rare tumor and difficult to diagnose on clinical as well as pathological grounds because of lack of pigmentation and variable histopathological features.<sup>[2]</sup> According to a recent study by Choi *et al.*, tyrosine kinase inhibitors could be effective in the treatment of complete type of acral amelanotic melanoma which are found to have KIT mutation.<sup>[2]</sup>

This is the second case of amelanotic melanoma in the backdrop of lymphedema after Nayak *et al.* who also reported a similar case in a 60-year-old farmer.<sup>[3]</sup> In view of the new therapeutic modalities which could be of use in KIT mutated complete type of acral amelanotic melanoma, its recognition is important.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

**Sangita Bohara, Ajay Kumar<sup>1</sup>,  
Sunil K. Gupta<sup>2</sup>, Vivek Gupta**

*Departments of Pathology, <sup>1</sup>Surgery, <sup>2</sup>Dermatology and Venereology,  
Hind Institute of Medical Sciences, Safedabad, Barabanki, Uttar Pradesh,  
India*


**Address for correspondence:**

*Dr. Sangita Bohara,  
Department of Pathology, Hind Institute of Medical Sciences,  
Safedabad, Barabanki, Uttar Pradesh, India.  
E-mail: drsangitamamc@gmail.com*

**References**

1. Lee R, Saardi KM, Schwartz RA. Lymphedema-related angiogenic tumors and other malignancies. *Clin Dermatol* 2014;32:616-20.
2. Choi YD, Chun SM, Jin SA, Lee JB, Yun SJ. Amelanotic acral melanomas: Clinicopathological, BRAF mutation, and KIT aberration analyses. *J Am Acad Dermatol* 2013;69:700-7.
3. Nayak M, Patra S, Meher S, Sasmal PK. Amelanotic melanoma arising in filarial leg: A report of a rare case. *J Clin Diagn Res* 2017;11:ED07-ED09.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

Access this article online	
<b>Website:</b> www.idoj.in	<b>Quick Response Code</b> 
<b>DOI:</b> 10.4103/idoj.IDOJ_251_17	

**How to cite this article:** Bohara S, Kumar A, Gupta SK, Gupta V. Unsuspected amelanotic melanoma in an elephantiasis foot. *Indian Dermatol Online J* 2018;9:202-3.

**Received:** September, 2017. **Accepted:** December, 2017.

© 2018 Indian Dermatology Online Journal | Published by Wolters Kluwer - Medknow